

chain nodes :

7 14

ring nodes :

1 2 3 4 5 6 9 10 11 12 13

chain bonds :

1-7 4-9 12-14

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-13 10-11 11-12 12-13

exact/norm bonds :

1-7 4-9 9-10 9-13 12-14

exact bonds :

10-11 11-12 12-13

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

containing 1 : 9 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:Atom 10:Atom 11:Atom

12:Atom 13:Atom 14:Atom

Generic attributes :

14:

Number of Carbon Atoms : less than 7

Number of Hetero Atoms : 2 or more

Element Count :

Node 14: Limited

C,C3

N,N2

S,S0

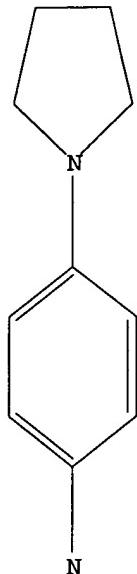
O,O0

L3 STRUCTURE UPLOADED

=> d

L3 HAS NO ANSWERS

L3 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> s 11
SAMPLE SEARCH INITIATED 12:55:21 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      85 TO ITERATE

100.0% PROCESSED      85 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:    1147 TO     2253
PROJECTED ANSWERS:        0 TO      0
```

L4 0 SEA SSS SAM L1

```
=> s 11 full
FULL SEARCH INITIATED 12:55:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      1714 TO ITERATE
```

```
100.0% PROCESSED      1714 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01
```

L5 0 SEA SSS FUL L1

```
=> fil caplus
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY           SESSION
FULL ESTIMATED COST          167.82          168.03
```

```
FILE 'CAPLUS' ENTERED AT 12:56:22 ON 16 FEB 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)
```

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FILE COVERS 1907 - 16 Feb 2006 VOL 144 ISS 8
FILE LAST UPDATED: 15 Feb 2006 (20060215/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s us20040077852/pn
L6 1 US20040077852/PN
(US2004077852/PN)

=> d

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:17396 CAPLUS
DN 140:81854
TI Hair dyeing compositions containing pyrrolidinyl-p-phenylenediamine derivatives
IN Sabelle, Stephane; Ramos, Laure; Leduc, Madeleine
PA L'Oreal, Fr.
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DT Patent
LA French
PAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1378230	A1	20040107	EP 2003-291616	20030701
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2841780	A1	20040109	FR 2002-8514	20020705
FR 2841780	B1	20040910		
JP 2004035559	A2	20040205	JP 2003-271500	20030707
US 2004077852	A1	20040422	US 2003-612986	20030707

<--
PRAI FR 2002-8514 A 20020705
US 2002-408900P P 20020909
OS MARPAT 140:81854
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> select 16
ENTER ANSWER NUMBER OR RANGE (1-):1
ENTER DISPLAY CODE (TI) OR ?:rn
E1 THROUGH E48 ASSIGNED
```

```
=> fil reg
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                               ENTRY           SESSION
FULL ESTIMATED COST          3.63            171.66
```

```
FILE 'REGISTRY' ENTERED AT 12:56:50 ON 16 FEB 2006
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```

```
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```

```
Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.
```

```
STRUCTURE FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9
DICTIONARY FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9
```

```
New CAS Information Use Policies, enter HELP USAGETERMS for details.
```

```
TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005
```

```
Please note that search-term pricing does apply when
conducting SmartSELECT searches.
```

```
*****
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,      *
* effective March 20, 2005. A new display format, IDERL, is now        *
* available and contains the CA role and document type information.   *
*
*****
```

```
Structure search iteration limits have been increased. See HELP SLIMITS
for details.
```

```
REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:
```

```
http://www.cas.org/ONLINE/UG/regprops.html
```

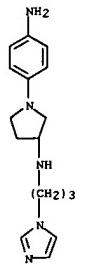
```
=> s e1-e48
    1 108-45-2/BI
        (108-45-2/RN)
    1 123-30-8/BI
        (123-30-8/RN)
    1 123-75-1/BI
        (123-75-1/RN)
    1 16867-03-1/BI
        (16867-03-1/RN)
    1 2380-86-1/BI
        (2380-86-1/RN)
    1 2835-95-2/BI
        (2835-95-2/RN)
```

1 288-32-4/BI
(288-32-4/RN)
1 30569-52-9/BI
(30569-52-9/RN)
1 350-46-9/BI
(350-46-9/RN)
1 361346-55-6/BI
(361346-55-6/RN)
1 40499-83-0/BI
(40499-83-0/RN)
1 5036-48-6/BI
(5036-48-6/RN)
1 591-27-5/BI
(591-27-5/RN)
1 607354-89-2/BI
(607354-89-2/RN)
1 612-76-0/BI
(612-76-0/RN)
1 640725-40-2/BI
(640725-40-2/RN)
1 640725-42-4/BI
(640725-42-4/RN)
1 640725-43-5/BI
(640725-43-5/RN)
1 640725-44-6/BI
(640725-44-6/RN)
1 640725-45-7/BI
(640725-45-7/RN)
1 640725-46-8/BI
(640725-46-8/RN)
1 640725-47-9/BI
(640725-47-9/RN)
1 640725-48-0/BI
(640725-48-0/RN)
1 640725-49-1/BI
(640725-49-1/RN)
1 640725-50-4/BI
(640725-50-4/RN)
1 640725-51-5/BI
(640725-51-5/RN)
1 640725-52-6/BI
(640725-52-6/RN)
1 640725-53-7/BI
(640725-53-7/RN)
1 640725-54-8/BI
(640725-54-8/RN)
1 640725-55-9/BI
(640725-55-9/RN)
1 640725-56-0/BI
(640725-56-0/RN)
1 640725-57-1/BI
(640725-57-1/RN)
1 640725-58-2/BI
(640725-58-2/RN)
1 640725-59-3/BI
(640725-59-3/RN)
1 640725-60-6/BI
(640725-60-6/RN)
1 640725-61-7/BI
(640725-61-7/RN)

1 640725-62-8/BI
(640725-62-8/RN)
1 640725-63-9/BI
(640725-63-9/RN)
1 640725-64-0/BI
(640725-64-0/RN)
1 640725-65-1/BI
(640725-65-1/RN)
1 640725-66-2/BI
(640725-66-2/RN)
1 640725-67-3/BI
(640725-67-3/RN)
1 640725-68-4/BI
(640725-68-4/RN)
1 66422-95-5/BI
(66422-95-5/RN)
1 7722-84-1/BI
(7722-84-1/RN)
1 80419-48-3/BI
(80419-48-3/RN)
1 9035-73-8/BI
(9035-73-8/RN)
1 95-55-6/BI
(95-55-6/RN)
L7 48 (108-45-2/BI OR 123-30-8/BI OR 123-75-1/BI OR 16867-03-1/BI OR
2380-86-1/BI OR 2835-95-2/BI OR 288-32-4/BI OR 30569-52-9/BI OR
350-46-9/BI OR 361346-55-6/BI OR 40499-83-0/BI OR 5036-48-6/BI
OR 591-27-5/BI OR 607354-89-2/BI OR 612-76-0/BI OR 640725-40-2/BI
OR 640725-42-4/BI OR 640725-43-5/BI OR 640725-44-6/BI OR 640725-
45-7/BI OR 640725-46-8/BI OR 640725-47-9/BI OR 640725-48-0/BI OR
640725-49-1/BI OR 640725-50-4/BI OR 640725-51-5/BI OR 640725-52-6
/BI OR 640725-53-7/BI OR 640725-54-8/BI OR 640725-55-9/BI OR
640725-56-0/BI OR 640725-57-1/BI OR 640725-58-2/BI OR 640725-59-3
/BI OR 640725-60-6/BI OR 640725-61-7/BI OR 640725-62-8/BI OR
640725-63-9/BI OR 640725-64-0/BI OR 640725-65-1/BI OR 640725-66-2
/BI OR 640725-67-3/BI OR 640725-68-4/BI OR 66422-95-5/BI OR 7722-
84-1/BI OR 80419-48-3/BI OR 9035-73-8/BI OR 95-55-6/BI)

=> d

L7 ANSWER 1 OF 48 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-68-4 REGISTRY
ED Entered STN: 23 Jan 2004
CN 1H-Imidazole-1-propanamine, N-[1-(4-aminophenyl)-3-pyrrolidinyl]-,
monohydrochloride (9CI) (CA INDEX NAME)
MF C16 H23 N5 . Cl H
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (640725-50-4)



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> fil reg  
COST IN U.S. DOLLARS  
SINCE FILE TOTAL  
ENTRY SESSION  
FULL ESTIMATED COST 2.34 174.00
```

FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006
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STRUCTURE FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9
DICTIONARY FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

```
*****  
*  
* The CA roles and document type information have been removed from *  
* the IDE default display format and the ED field has been added, *  
* effective March 20, 2005. A new display format, IDERL, is now *  
* available and contains the CA role and document type information. *  
*  
*****
```

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=> d his

(FILE 'HOME' ENTERED AT 12:54:24 ON 16 FEB 2006)

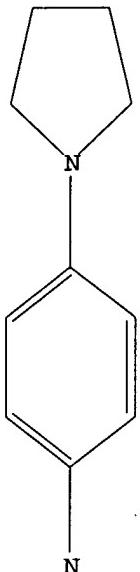
```
FILE 'REGISTRY' ENTERED AT 12:54:31 ON 16 FEB 2006  
L1      STRUCTURE uploaded  
L2      0 S L1  
L3      STRUCTURE uploaded  
L4      0 S L1  
L5      0 S L1 FULL
```

```
FILE 'CAPLUS' ENTERED AT 12:56:22 ON 16 FEB 2006  
L6      1 S US20040077852/PN  
        SELECT L6 1 RN
```

```
FILE 'REGISTRY' ENTERED AT 12:56:50 ON 16 FEB 2006  
L7      48 S E1-E48
```

FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006

=> d 13
L3 HAS NO ANSWERS
L3 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 13
SAMPLE SEARCH INITIATED 12:57:56 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2680 TO ITERATE

74.6% PROCESSED 2000 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 50495 TO 56705
PROJECTED ANSWERS: 7358 TO 9846

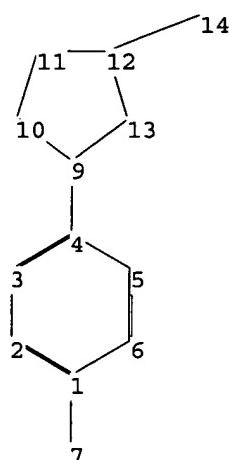
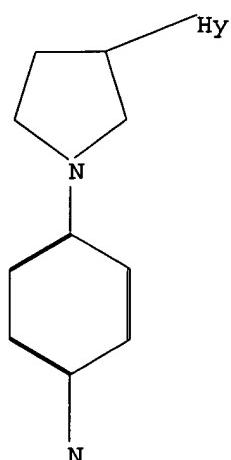
L8 50 SEA SSS SAM L3

=> s 13 full
FULL SEARCH INITIATED 12:58:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 55930 TO ITERATE

100.0% PROCESSED 55930 ITERATIONS 8658 ANSWERS
SEARCH TIME: 00.00.01

L9 8658 SEA SSS FUL L3

=>
Uploading C:\Program Files\Stnexp\Queries\QUERIES\10612986.str



chain nodes :

7 14

ring nodes :

1 2 3 4 5 6 9 10 11 12 13

chain bonds :

1-7 4-9 12-14

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-13 10-11 11-12 12-13

exact/norm bonds :

1-7 4-9 9-10 9-13 12-14

exact bonds :

10-11 11-12 12-13

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

containing 1 : 9 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom

Generic attributes :

14:

Number of Carbon Atoms : less than 7

Number of Hetero Atoms : 2 or more

Element Count :

Node 14: Limited

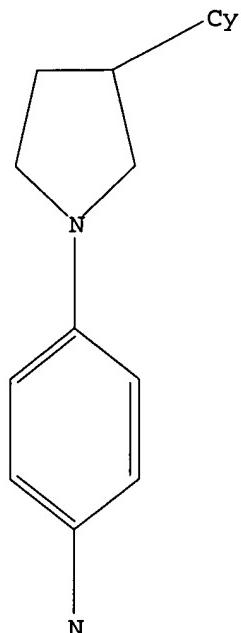
C, C3

N, N2

S, S0

O, O0

L10 HAS NO ANSWERS
L10 STR



Structure attributes must be viewed using STN Express query preparation.

=> d his

(FILE 'HOME' ENTERED AT 12:54:24 ON 16 FEB 2006)

FILE 'REGISTRY' ENTERED AT 12:54:31 ON 16 FEB 2006

L1 STRUCTURE uploaded
L2 0 S L1
L3 STRUCTURE uploaded
L4 0 S L1
L5 0 S L1 FULL

FILE 'CAPLUS' ENTERED AT 12:56:22 ON 16 FEB 2006

L6 1 S US20040077852/PN
SELECT L6 1 RN

FILE 'REGISTRY' ENTERED AT 12:56:50 ON 16 FEB 2006

L7 48 S E1-E48

FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006

L8 50 S L3
L9 8658 S L3 FULL
L10 STRUCTURE uploaded

=> s l10 subset=19 full

FULL SUBSET SEARCH INITIATED 12:59:56 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 8658 TO ITERATE

100.0% PROCESSED 8658 ITERATIONS

303 ANSWERS

SEARCH TIME: 00.00.01

L11 303 SEA SUB=L9 SSS FUL L10

=> s l11 and caplus/lc

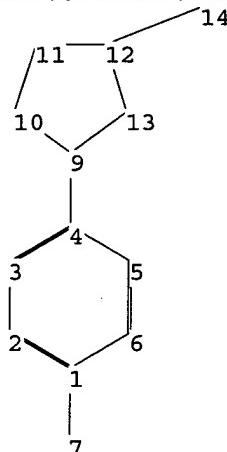
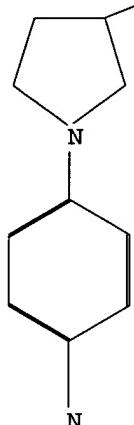
49740058 CAPLUS/LC

L12 205 L11 AND CAPLUS/LC

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\10612986.str

Hy



chain nodes :

7 14

ring nodes :

1 2 3 4 5 6 9 10 11 12 13

chain bonds :

1-7 4-9 12-14

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-13 10-11 11-12 12-13

exact/norm bonds :

1-7 4-9 9-10 9-13 12-14

exact bonds :

10-11 11-12 12-13

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

containing 1 : 9 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:Atom 10:Atom 11:Atom

12:Atom 13:Atom 14:Atom

Generic attributes :

14:

Number of Carbon Atoms : less than 7

Number of Hetero Atoms : 2 or more

Element Count :

Node 14: Limited

C,C3

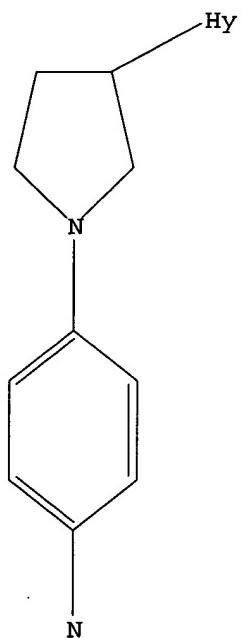
N,N2

S,S0

O,O0

L13 STRUCTURE UPLOADED

=> d
L13 HAS NO ANSWERS
L13 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> s 113 subset=111 full
FULL SUBSET SEARCH INITIATED 13:00:33 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -          303 TO ITERATE
```

100.0% PROCESSED 303 ITERATIONS 239 ANSWERS
SEARCH TIME: 00:00:01

T-14 239 SEA SUB=T-11 SSS FULL T-13

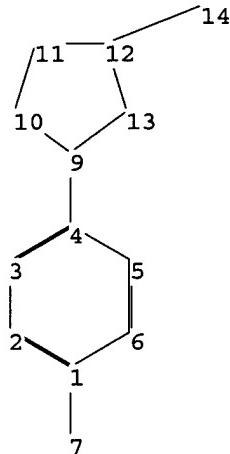
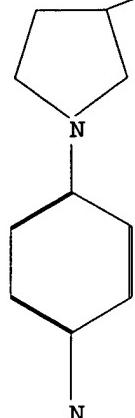
=> s l14 and caplusl/c
NUMERIC VALUE NOT VALID 'CAPPLUSL'
 0 CAPPLUS/C
L15 0 L14 AND CAPPLUSL/C

```
=> s l14 and caplus/lc  
        49740058 CAPPLUS/LC  
L16      149 L14 AND CAPPLUS/LC
```

=>

Uploading C:\Program Files\Stnexp\Queries\QUERIES\10612986.str

Hy



chain nodes :

7 14

ring nodes :

1 2 3 4 5 6 9 10 11 12 13

chain bonds :

1-7 4-9 12-14

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-13 10-11 11-12 12-13

exact/norm bonds :

1-7 4-9 9-10 9-13 12-14

exact bonds :

10-11 11-12 12-13

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

containing 1 : 9 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:Atom 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom

Generic attributes :

14:

Number of Carbon Atoms : less than 7

Number of Hetero Atoms : 2 or more

Element Count :

Node 14: Limited

C,C3

N,N2

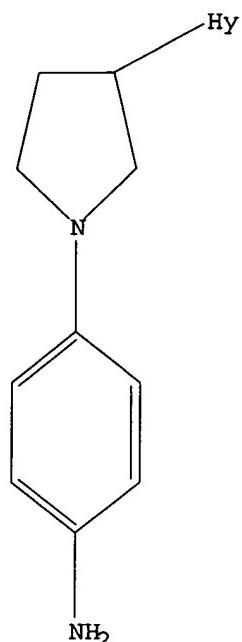
S,S0

O,O0

L17 STRUCTURE UPLOADED

=> d

L17 HAS NO ANSWERS
L17 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l17 subset=l14 full
FULL SUBSET SEARCH INITIATED 13:01:23 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 239 TO ITERATE

100.0% PROCESSED 239 ITERATIONS 67 ANSWERS
SEARCH TIME: 00.00.01

L18 67 SEA SUB=L14 SSS FUL L17

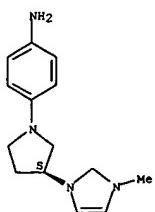
=> s l18 and caplus/lc
49740058 CAPLUS/LC
L19 47 L18 AND CAPLUS/LC

=> s l18 not l19
L20 20 L18 NOT L19

=> d l20 1-20

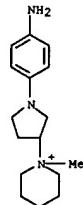
L20 ANSWER 1 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852803-70-4 REGISTRY
ED Entered STN: 23 Jun 2005
CN 1H-Imidazolium, 1-[(3S)-1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C14 H19 N4
CI COM
SR CA

Absolute stereochemistry.



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

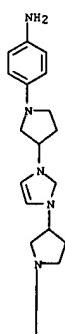
L20 ANSWER 2 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852803-64-6 REGISTRY
ED Entered STN: 23 Jun 2005
CN Piperidinium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H26 N3
CI COM
SR CA



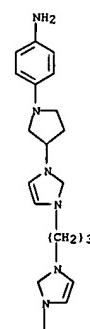
L20 ANSWER 3 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 785775-69-1 REGISTRY
ED Entered STN: 22 Nov 2004
CN 1H-Imidazolium, 1,3-bis[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C23 H29 N6
CI COM
SR CA

L20 ANSWER 4 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 781613-57-8 REGISTRY
ED Entered STN: 16 Nov 2004
CN 1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C29 H38 N8
CI COM
SR CA

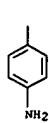
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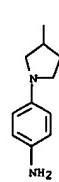
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PAGE 2-A



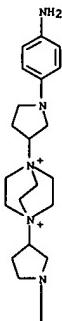
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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

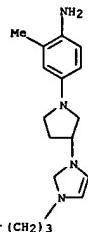
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L20 ANSWER 5 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 779324-26-4 REGISTRY
ED Entered STN: 12 Nov 2004
CN 1,4-Diazoniabicyclo[2.2.2]octane, 1,4-bis[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H38 N6
CI COM
SR CA

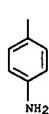


PAGE 1-A

L20 ANSWER 6 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 778573-39-0 REGISTRY
ED Entered STN: 11 Nov 2004
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]- (9CI) (CA INDEX NAME)
MF C20 H33 N4 Si
CI COM
SR CA

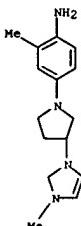


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE



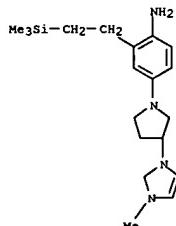
PAGE 2-A

L20 ANSWER 7 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 771473-53-1 REGISTRY
ED Entered STN: 28 Oct 2004
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
MF C15 H21 N4
CI COM
SR CA



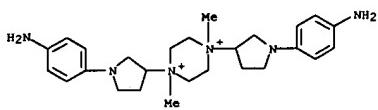
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L20 ANSWER 8 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 769921-12-2 REGISTRY
ED Entered STN: 27 Oct 2004
CN 1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
MF C19 H31 N4 Si
CI COM
SR CA

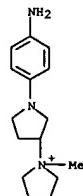


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L20 ANSWER 9 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 765898-84-8 REGISTRY
ED Entered STN: 20 Oct 2004
CN Piperazinium, 1,4-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-1,4-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H40 N6
CI COM
SR CA

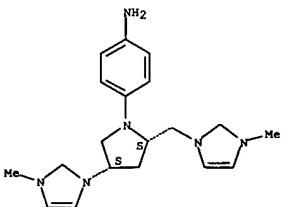


L20 ANSWER 10 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 765897-50-5 REGISTRY
ED Entered STN: 20 Oct 2004
CN 1,3'-Bipyrtolidinium, 1'-(4-aminophenyl)-1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C15 H24 N3
CI COM
SR CA

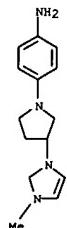


L20 ANSWER 11 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 764662-22-8 REGISTRY
ED Entered STN: 18 Oct 2004
CN 1H-Imidazolium,
1-[(3S,5S)-1-(4-aminophenyl)-5-[(3-methyl-1H-imidazolium-1-yl)methyl]-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H26 N6
CI COM
SR CA

Absolute stereochemistry.



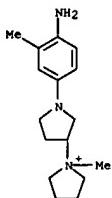
L20 ANSWER 12 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 760171-36-6 REGISTRY
ED Entered STN: 11 Oct 2004
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
MF C14 H19 N4
CI COM
SR CA



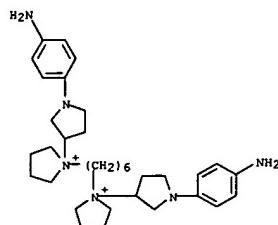
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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

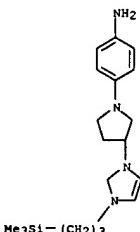
L20 ANSWER 13 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 753447-49-3 REGISTRY
ED Entered STN: 29 Sep 2004
CN 1,3'-Bipyrrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H26 N3
CI COM
SR CA



L20 ANSWER 14 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 749207-32-7 REGISTRY
ED Entered STN: 22 Sep 2004
CN 1,3'-Bipyrrrolidinium, 1,1''-(1,6-hexanediyil)bis[1'-(4-aminophenyl)- (9CI) (CA INDEX NAME)
MF C34 H54 N6
CI COM
SR CA

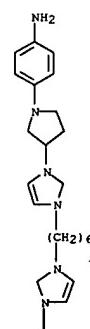


L20 ANSWER 15 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 749205-99-0 REGISTRY
ED Entered STN: 22 Sep 2004
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]- (9CI) (CA INDEX NAME)
MF C19 H31 N4 Si
CI COM
SR CA

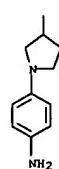


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L20 ANSWER 16 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 749748-65-2 REGISTRY
ED Entered STN: 21 Sep 2004
CN 1H-Imidazolium, 1,1''-(1,6-hexanediyil)bis[3-[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C32 H44 N6
CI COM
SR CA



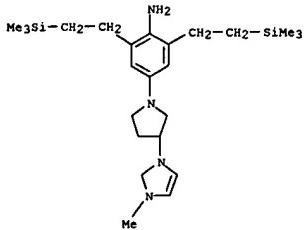
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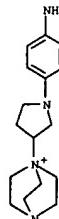
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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L20 ANSWER 17 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 740082-89-7 REGISTRY
ED Entered STN: 06 Sep 2004
CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
MF C24 H43 N4 Si2
CI COM
SR CA

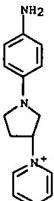


L20 ANSWER 18 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-08-8 REGISTRY
ED Entered STN: 21 Oct 2003
CN 4-Aza-1-azoniabicyclo[2.2.2]octane, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H25 N4
CI COM
SR CA

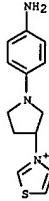


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L20 ANSWER 19 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-04-4 REGISTRY
ED Entered STN: 21 Oct 2003
CN Pyridinium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C15 H18 N3
CI COM
SR CA



L20 ANSWER 20 OF 20 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-01-1 REGISTRY
ED Entered STN: 21 Oct 2003
CN Thiazolium, 3-[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H16 N3 S
CI COM
SR CA



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L3      STRUCTURE uploaded
L4      0 S L1
L5      0 S L1 FULL

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L7      48 S E1-E48

FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006
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L9      8658 S L3 FULL
L10     STRUCTURE uploaded
L11     303 S L10 FULL SUB=L9
L12     205 S L11 AND CAPLUS/LC
L13     STRUCTURE uploaded
L14     239 S L13 FULL SUB=L11
L15     0 S L14 AND CAPLUS/LC
L16     149 S L14 AND CAPLUS/LC
L17     STRUCTURE uploaded
L18     67 S L17 FULL SUB=L14
L19     47 S L18 AND CAPLUS/LC
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<http://www.cas.org/infopolicy.html>

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COST IN U.S. DOLLARS		ENTRY	SESSION
FULL ESTIMATED COST		0.46	520.60

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

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provided by InfoChem.

STRUCTURE FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9
DICTIONARY FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

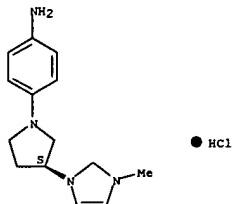
TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *

L19 ANSWER 1 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852619-37-5 REGISTRY
ED Entered STN: 21 Jun 2005
CN 1H-Imidazolium, 1-[{(3S)-1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-,
chloride, monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C14 H19 N4 . Cl H . Cl
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (852803-70-4)

Absolute stereochemistry.



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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L3 STRUCTURE UPLOADED
L4 0 S L1
L5 0 S L1 FULL

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 SELECT L6 1 RN

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L7 48 S E1-E48

FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006

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L9 8658 S L3 FULL
L10 STRUCTURE UPLOADED
L11 303 S L10 FULL SUB=L9
L12 205 S L11 AND CAPLUS/LC
L13 STRUCTURE UPLOADED
L14 239 S L13 FULL SUB=L11
L15 0 S L14 AND CAPLUSL/C
L16 149 S L14 AND CAPLUS/LC
L17 STRUCTURE UPLOADED
L18 67 S L17 FULL SUB=L14
L19 47 S L18 AND CAPLUS/LC
L20 20 S L18 NOT L19

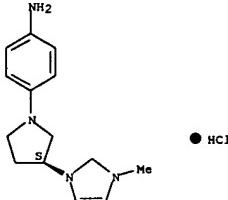
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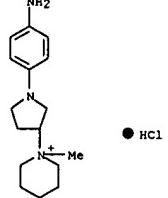
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L19 ANSWER 1 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852619-37-5 REGISTRY
ED Entered STN: 21 Jun 2005
CN 1H-Imidazolium, 1-[{(3S)-1-(4-aminophenyl)-3-pyrrolidinyl}-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C14 H19 N4 . Cl H . Cl
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (852803-70-4)

Absolute stereochemistry.



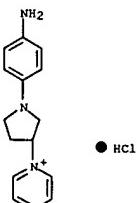
L19 ANSWER 2 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852615-63-5 REGISTRY
ED Entered STN: 21 Jun 2005
CN Piperidinium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-1-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN [1-(4-Aminophenyl)pyrrolidin-3-yl] (methyl)piperidinium chloride
MF C16 H26 N3 . Cl H . Cl
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (852803-64-6)



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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 3 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852615-62-4 REGISTRY
ED Entered STN: 21 Jun 2005
CN Pyridinium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-, chloride, monohydrochloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN [(1-(4-Aminophenyl)pyrrolidin-3-yl]pyridinium chloride monohydrochloride
MF C15 H18 N3 . Cl H . Cl
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
CRN (607355-04-4)

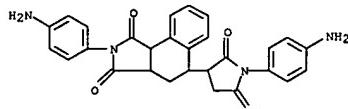


● Cl-

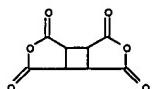
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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 4 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 842125-88-6 REGISTRY
ED Entered STN: 04 Mar 2005
CN Cyclobuta[1,2-c:3,4-c']difuranetetrone, tetrahydro-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-tetrahydro-1H-benz[e]isindole-1,3(2H)-dione (9CI) (CA INDEX NAME)
MF C28 H24 N4 O4 . C8 H4 O6)x
CI PMS
PCT Polyamic acid, Polyamic acid formed, Polyimide, Polyimide formed
SR CA
LC STN Files: CA, CAPLUS

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CRN 842125-88-2
CMF C28 H24 N4 O4

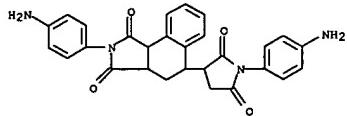


CM 2
CRN 4415-87-6
CMF C8 H4 O6



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 5 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 842125-84-2 REGISTRY
ED Entered STN: 04 Mar 2005
CN 1H-Benz[e]isoindole-1,3(2H)-dione,
2-(4-aminophenyl)-5-(1-(4-aminophenyl)-
2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C28 H24 N4 O4
CI COM
SR CA
LC STN Files: CA, CAPLUS



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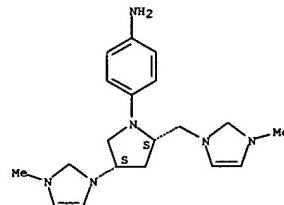
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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 6 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 764662-23-9 REGISTRY
ED Entered STN: 18 Oct 2004
CN 1H-Imidazolium,
1-[(3S,5S)-1-(4-aminophenyl)-5-[(3-methyl-1H-imidazolium-1-
yl)methyl]-3-pyrrolidinyl]-3-methyl-, dimethanesulfonate (9CI) (CA INDEX
NAME)
FS STEREOSEARCH
MF C19 H26 N6 . 2 C H3 O3 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

CM 1

CRN 764662-22-8
CMF C19 H26 N6

Absolute stereochemistry.



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

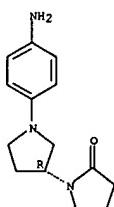
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CMF C H3 O3 S



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 7 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 748183-31-5 REGISTRY
ED Entered STN: 20 Sep 2004
CN [1,3'-Bipyrrolidin]-2-one, 1'-(4-aminophenyl)-, (3'R)- (9CI) (CA INDEX
NAME)
FS STEREOSEARCH
MF C14 H19 N3 O
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

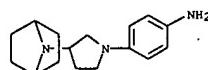
Absolute stereochemistry.



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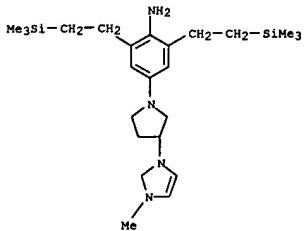
L19 ANSWER 8 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 748183-30-4 REGISTRY
ED Entered STN: 20 Sep 2004
CN Benzenamine, 4-[(3-(7-azabicyclo[2.2.1]hept-7-yl)-1-pyrrolidinyl)- (9CI)
(CA INDEX NAME)
FS 3D CONCORD
MF C16 H23 N3
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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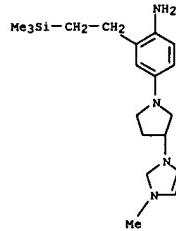
L19 ANSWER 9 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 701975-31-7 REGISTRY
ED Entered STN: 01 Jul 2004
CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)
MF C24 H43 N4 Si2 . Cl
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN (740082-89-7)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
14 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES IN FILE CAPLUS (1907 TO DATE)

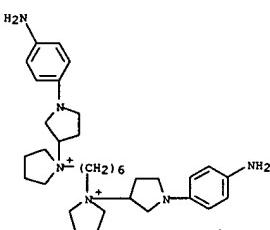
L19 ANSWER 10 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 701975-28-2 REGISTRY
ED Entered STN: 01 Jul 2004
CN 1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)
MF C19 H31 N4 Si . Cl
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
CRN (769921-12-2)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
14 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES IN FILE CAPLUS (1907 TO DATE)

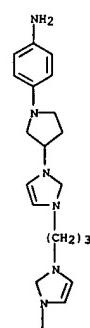
L19 ANSWER 11 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 667915-25-5 REGISTRY
ED Entered STN: 26 Mar 2004
CN 1,3'-Bipyrrrolidinium, 1,1'-(1,6-hexanediyil)bis[1'-(4-aminophenyl)-, dichloride (9CI) (CA INDEX NAME)
MF C34 H54 N6 . 2 Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (749207-32-7)



● 2 Cl⁻

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 12 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 667915-11-9 REGISTRY
ED Entered STN: 26 Mar 2004
CN 1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-(1-(4-aminophenyl)-3-pyrrolidinyl)-, dichloride (9CI) (CA INDEX NAME)
MF C29 H38 N8 . 2 Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (781613-57-8)



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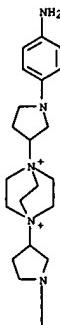
● 2 Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L19 ANSWER 12 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN (Continued)
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 13 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 667914-99-0 REGISTRY
ED Entered STN: 26 Mar 2004
CN 1,4-Diazoniabicyclo[2.2.2]octane, 1,4-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-, dichloride (9CI) (CA INDEX NAME)
MF C26 H38 N6 . 2 Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (779324-26-4)

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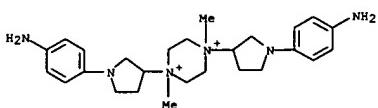


●2 Cl⁻

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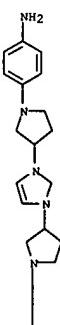
L19 ANSWER 14 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 667914-97-8 REGISTRY
ED Entered STN: 26 Mar 2004
CN Piperazinium, 1,4-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-1,4-dimethyl-, dichloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1,4-Bis(1-(4-aminophenyl)pyrrolidin-3-yl)-1,4-dimethylpiperazinium dichloride
MF C26 H40 N6 . 2 Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (765898-84-8)

L19 ANSWER 15 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 667914-96-7 REGISTRY
ED Entered STN: 26 Mar 2004
CN 1H-Imidazolium, 1,3-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-, chloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1,3-Bis[1-(4-aminophenyl)pyrrolidin-3-yl]-1H-imidazol-3-ium chloride
MF C23 H29 N6 . Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (785775-69-1)

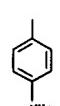


●2 Cl⁻

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)



PAGE 1-A



PAGE 2-A

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 16 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN

RN 667914-95-6 REGISTRY

ED Entered STN: 26 Mar 2004

CN 1H-Imidazolium, 1,1'-(1,6-hexanediyl)bis[3-(1-(4-aminophenyl)-3-

pyrrolidinyl)-, dichloride (9CI) (CA INDEX NAME)

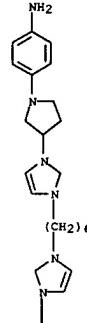
MF C32 H44 N8 . 2 Cl

SR CA

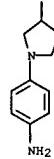
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CRN (748768-65-2)

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PAGE 2-A

● 2 Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L19 ANSWER 17 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN

RN 667914-90-1 REGISTRY

ED Entered STN: 26 Mar 2004

CN 1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-(1-(4-aminophenyl)-3-

pyrrolidinyl)-, dibromide, dihydrobromide (9CI) (CA INDEX NAME)

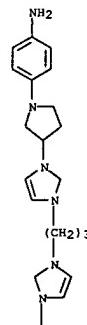
MF C29 H38 N8 . 2 Br H . 2 Br

SR CA

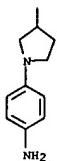
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CRN (781613-57-8)

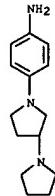
PAGE 1-A



PAGE 2-A

● 2 Br⁻

L19 ANSWER 18 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 640725-66-2 REGISTRY
 ED Entered STN: 23 Jan 2004
 CN Benzenamine, 4-[1,3'-bipyrrolidin]-1'-yl-, monohydrochloride (9CI) (CA INDEX NAME)
 MF C14 H21 N3 . Cl H
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL
 CRN (640725-43-5)



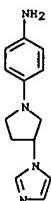
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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

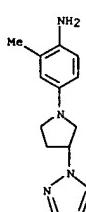
L19 ANSWER 19 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 640725-65-1 REGISTRY
 ED Entered STN: 23 Jan 2004
 CN Benzenamine, 4-[3-(1H-imidazol-1-yl)-1-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)
 MF C13 H16 N4 . Cl H
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL
 CRN (640725-40-2)



● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 20 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 640725-60-6 REGISTRY
 ED Entered STN: 23 Jan 2004
 CN Benzenamine, 2-methyl-4-[3-(1H-pyrazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
 FS 3D CONCORD
 MF C14 H18 N4
 SR CA
 LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

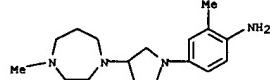
L19 ANSWER 21 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-59-3 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[3-(1H-pyrazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H16 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

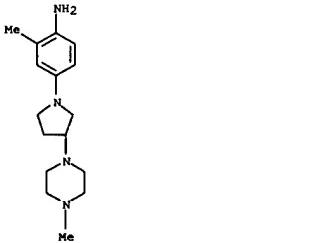
L19 ANSWER 22 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-56-0 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[3-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-1-pyrrolidinyl]-2-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C17 H28 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

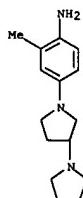
L19 ANSWER 23 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-55-9 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 2-methyl-4-[3-(4-methyl-1-piperazinyl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H26 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

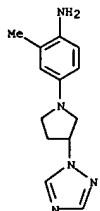
L19 ANSWER 24 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-54-8 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[1,3'-bipyrrrolidin]-1'-yl-2-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C15 H23 N3
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



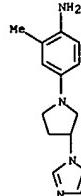
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 25 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-53-7 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 2-methyl-4-[3-(1H-1,2,4-triazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H17 N5
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



L19 ANSWER 26 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-52-6 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[3-(1H-imidazol-1-yl)-1-pyrrolidinyl]-2-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H18 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



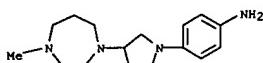
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1 REFERENCES IN FILE CA (1907 TO DATE)
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PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

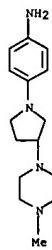
L19 ANSWER 27 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-45-7 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[3-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C16 H26 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

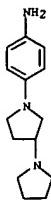
L19 ANSWER 28 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-44-6 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[3-(4-methyl-1-piperazinyl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C15 H24 N4
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

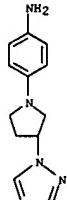
L19 ANSWER 29 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-43-5 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[1,3'-bipyrrolidin]-1'-yl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C14 H21 N3
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

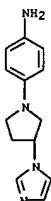
L19 ANSWER 30 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-42-4 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[3-(1H-1,2,4-triazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C12 H15 N5
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

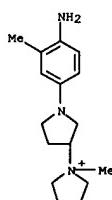
L19 ANSWER 31 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 640725-40-2 REGISTRY
ED Entered STN: 23 Jan 2004
CN Benzenamine, 4-[3-(1H-imidazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C13 H16 N4
CI COM
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
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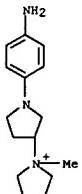
L19 ANSWER 32 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-21-5 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)
MF C16 H26 N3 . Cl
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (753447-49-3)



● Cl-

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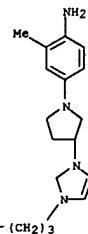
L19 ANSWER 33 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-20-4 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1,3'-Bipyrrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)
MF C15 H24 N3 . Cl
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (765897-50-5)



● Cl⁻

15 REFERENCES IN FILE CA (1907 TO DATE)
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

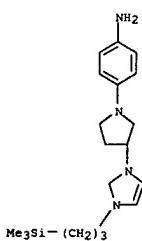
L19 ANSWER 34 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-19-1 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)
MF C20 H33 N4 Si . Cl
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (778573-39-0)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
14 REFERENCES IN FILE CA (1907 TO DATE)
14 REFERENCES IN FILE CAPLUS (1907 TO DATE)

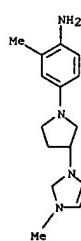
L19 ANSWER 35 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-18-0 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)
MF C15 H31 N4 Si . Cl
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (749205-99-0)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
15 REFERENCES IN FILE CA (1907 TO DATE)
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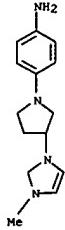
L19 ANSWER 36 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-16-8 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)
MF C15 H21 N4 . Cl
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (771473-53-1)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
15 REFERENCES IN FILE CA (1907 TO DATE)
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 37 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-12-4 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride
(9CI) (CA INDEX NAME)
MF C14 H19 N4 . Cl
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (760171-36-6)



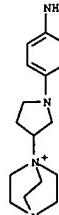
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
15 REFERENCES IN FILE CA (1907 TO DATE)
15 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 38 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-09-9 REGISTRY
ED Entered STN: 21 Oct 2003
CN 4-Aza-1-azoniabicyclo[2.2.2]octane,
1-[1-(4-aminophenyl)-3-pyrrolidinyl]-
methanesulfonate, mono(hydrochloride) (9CI) (CA INDEX NAME)
MF C16 H25 N4 . C H3 O3 S . Cl H
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CM 1

CRN 607355-08-8
CMF C16 H25 N4



CM 2

CRN 16053-58-0
CMF C H3 O3 S

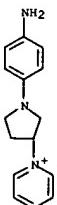


1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 39 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-05-5 REGISTRY
ED Entered STN: 21 Oct 2003
CN Pyridinium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-, acetate (9CI) (CA INDEX NAME)
MF C15 H18 N3 . C2 H3 O2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CM 1

CRN 607355-04-4
CMF C15 H18 N3



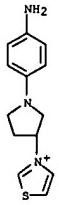
CM 2

CRN 71-50-1
CMF C2 H3 O2

L19 ANSWER 40 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607355-02-2 REGISTRY
ED Entered STN: 21 Oct 2003
CN Thiazolium, 3-[1-(4-aminophenyl)-3-pyrrolidinyl]-, acetate (9CI) (CA INDEX NAME)
MF C13 H16 N3 S . C2 H3 O2
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

CM 1

CRN 607355-01-1
CMF C13 H16 N3 S



CM 2

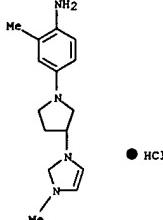
CRN 71-50-1
CMF C2 H3 O2



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

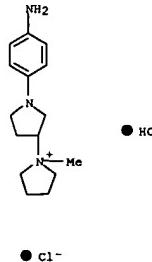
L19 ANSWER 41 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607354-98-3 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-[1-(4-Amino-3-methylphenyl)pyrrolidin-3-yl]-3-methyl-1H-imidazol-3-ium chloride monohydrochloride
MF C15 H21 N4 . Cl H . Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (771473-53-1)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

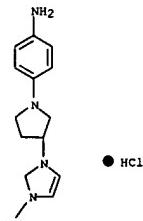
L19 ANSWER 42 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607354-93-8 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)
MF C15 H24 N3 . Cl H . Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (7765897-50-5)



● Cl⁻

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 43 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607354-86-9 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium chloride hydrochloride
MF C14 H19 N4 . Cl H . Cl
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
CRN (760171-36-6)



● Cl⁻

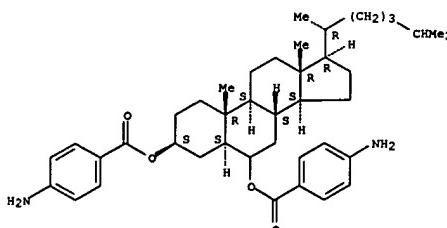
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L19 ANSWER 44 OF 47 REGISTRY COPYRIGHT 2006 ACS on STN
RN 194216-46-1 REGISTRY
ED Entered STN: 19 Sep 1997
CN Cholestan-3,6-diol, bis(4-aminobenzoate), (3B,5a)-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione, 4,4'-methylenebis[benzenamine] and tetrahydro-3a,6a-dimethylcyclobuta[1,2-c:3,4-c']difurantetron (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1H-Benz[e]isoindole-1,3(2H)-dione, 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-tetrahydro-8-methyl-, polymer with (3B,5a)-cholestan-3,6-diyi bis(4-aminobenzoate), 4,4'-methylenebis[benzenamine] and tetrahydro-3a,6a-dimethylcyclobuta[1,2-c:3,4-c']difurantetron (9CI)
CN Benzenamine, 4,4'-methylenebis-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione, (3B,5a)-cholestan-3,6-diyi bis(4-aminobenzoate) and tetrahydro-3a,6a-dimethylcyclobuta[1,2-c:3,4-c']difurantetron (9CI)
CN Cyclobuta[1,2-c:3,4-c']difurantetron, tetrahydro-3a,6a-dimethyl-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione, (3B,5a)-cholestan-3,6-diyi bis(4-aminobenzoate) and 4,4'-methylenebis[benzenamine] (9CI)
FS STEREOSEARCH
MF (C41 H58 N2 O4 . C29 H26 N4 O4 . C13 H14 N2 . C10 H8 O6)x
CI PMS
PCT Polyamic acid, Polyamic acid formed, Polyester, Polyimide, Polyimide formed
SR CA
LC STN Files: CA, CAPLUS

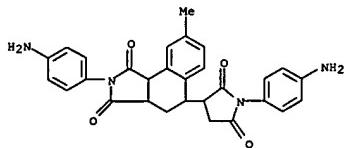
CM 1

CRN 194216-36-9
CMF C41 H58 N2 O4

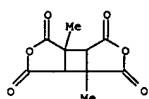
Absolute stereochemistry.



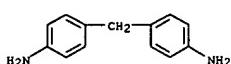
CM 2

CRN 194216-35-8
CMF C29 H26 N4 O4

CM 3

CRN 137820-87-2
CMF C10 H8 O6

CM 4

CRN 101-77-9
CMF C13 H14 N21 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 194216-42-7 REGISTRY

ED Entered STN: 19 Sep 1997

CN Cholestan-3,6-diol, bis(4-aminobenzoate), (3 β ,5 α)-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3 α ,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isindole-1,3(2H)-dione, 1H,3H-benz[1,2-c:4,5-c']difuran-1,3,5,7-tetrone and 4,4'-(1-methylethylidene)bis(4,1-phenyleneoxy)bis[benzeneamine] (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H,3H-Benz[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3 α ,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isindole-1,3(2H)-dione, (3 β ,5 α)-cholestan-3,6-diol bis(4-aminobenzoate) and 4,4'-(1-methylethylidene)bis(4,1-phenyleneoxy)bis[benzeneamine] (9CI)CN 1H-Benz[e]isindole-1,3(2H)-dione, 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3 α ,4,5,9b-tetrahydro-8-methyl-, polymer with 1H,3H-benz[1,2-c:4,5-c']difuran-1,3,5,7-tetrone, (3 β ,5 α)-cholestan-3,6-diol bis(4-aminobenzoate) and 4,4'-(1-methylethylidene)bis(4,1-phenyleneoxy)bis[benzeneamine] (9CI)CN Benzeneamine, 4,4'-(1-methylethylidene)bis(4,1-phenyleneoxy)bis-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3 α ,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isindole-1,3(2H)-dione, 1H,3H-benz[1,2-c:4,5-c']difuran-1,3,5,7-tetrone and (3 β ,5 α)-cholestan-3,6-diol bis(4-aminobenzoate) (9CI)

FS STEREOSEARCH

MF (C41 H58 N2 O4 . C29 H26 N4 O4 . C27 H25 N2 O2 . C10 H2 O6)x

CI PMS

PCT Polyamic acid, Polyamic acid formed, Polyester, Polyether, Polyimide, Polyimide formed

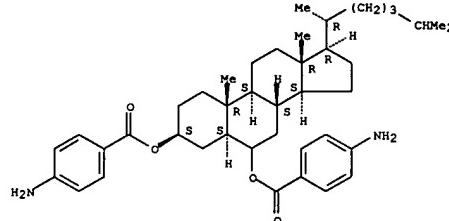
SR CA

LC STN Files: CA, CAPLUS

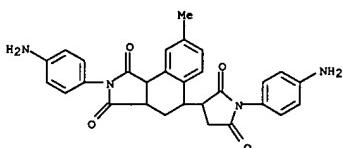
CM 1

CRN 194216-36-9
CMF C41 H58 N2 O4

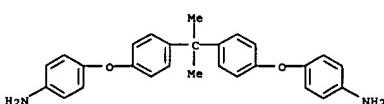
Absolute stereochemistry.



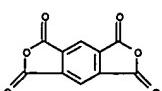
CM 2

CRN 194216-35-8
CMF C29 H26 N4 O4

CM 3

CRN 13080-86-9
CMF C27 H26 N2 O2

CM 4

CRN 89-32-7
CMF C10 H2 O61 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

RN 194216-37-0 REGISTRY

ED Entered STN: 19 Sep 1997

CN Cholestan-3,6-diol, bis(4-aminobenzoate), (3 β ,5 α)-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3 α ,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isindole-1,3(2H)-dione, 4,4'-(1-methylethylidene)bis[benzeneamine] and 3 α ,4,5,9b-tetrahydro-5-methyl-5-(tetrahydro-2,5-dioxo-3-furanyl)naphtho[1,2-c]furan-1,3-dione (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1H-Benz[e]isindole-1,3(2H)-dione, 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3 α ,4,5,9b-tetrahydro-8-methyl-, polymer with (3 β ,5 α)-cholestan-3,6-diol bis(4-aminobenzoate), 4,4'-(1-methylethylidene)bis[benzeneamine] and 3 α ,4,5,9b-tetrahydro-5-methyl-5-(tetrahydro-2,5-dioxo-3-furanyl)naphtho[1,2-c]furan-1,3-dione (9CI)CN Benzeneamine, 4,4'-methylenebis-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-furanyl]-3 α ,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isindole-1,3(2H)-dione, (3 β ,5 α)-cholestan-3,6-diol bis(4-aminobenzoate) and 3 α ,4,5,9b-tetrahydro-5-methyl-5-(tetrahydro-2,5-dioxo-3-furanyl)naphtho[1,2-c]furan-1,3-dione (9CI)

CN Naphtho[1,2-c]furan-1,3-dione,

3 α ,4,5,9b-tetrahydro-5-methyl-5-(tetrahydro-

2,5-dioxo-3-furanyl)-, polymer with

2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3 α ,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isindole-1,3(2H)-dione, (3 β ,5 α)-cholestan-3,6-diol bis(4-aminobenzoate) and 4,4'-(1-methylethylidene)bis[benzeneamine] (9CI)

FS STEREOSEARCH

MF (C41 H58 N2 O4 . C29 H26 N4 O4 . C17 H14 O6 . C13 H14 N2)x

CI PMS

PCT Polyamic acid, Polyamic acid formed, Polyester, Polyether, Polyimide, Polyimide formed

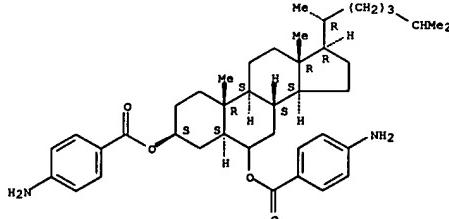
SR CA

LC STN Files: CA, CAPLUS

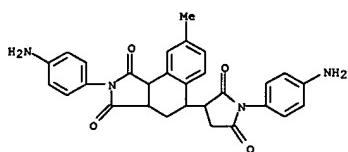
CM 1

CRN 194216-36-9
CMF C41 H58 N2 O4

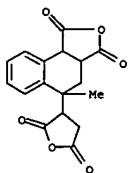
Absolute stereochemistry.



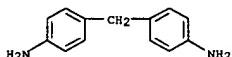
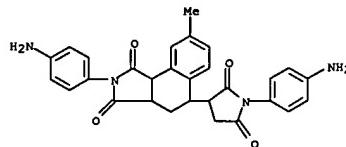
CM 2

CRN 194216-35-8
CMF C29 H26 N4 O4

CM 3

CRN 67879-21-4
CMF C17 H14 O6

CM 4

CRN 101-77-9
CMF C13 H14 N21 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> fil caplus
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
92.52	613.12

FILE 'CAPLUS' ENTERED AT 13:05:13 ON 16 FEB 2006
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 16 Feb 2006 VOL 144 ISS 8
FILE LAST UPDATED: 15 Feb 2006 (20060215/ED)

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<http://www.cas.org/infopolicy.html>

=> s 119
L21 23 L19

=> d ibib abs hitstr 1-23

=> fil reg			
COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION	
FULL ESTIMATED COST	123.97	737.09	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION	
CA SUBSCRIBER PRICE	-17.25	-17.25	

FILE 'REGISTRY' ENTERED AT 13:13:23 ON 16 FEB 2006
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STRUCTURE FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9
 DICTIONARY FILE UPDATES: 14 FEB 2006 HIGHEST RN 874270-88-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

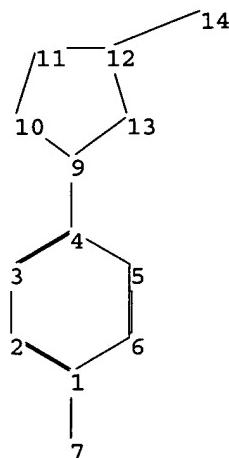
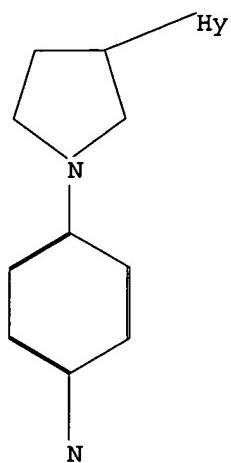
 *
 * The CA roles and document type information have been removed from *
 * the IDE default display format and the ED field has been added, *
 * effective March 20, 2005. A new display format, IDERL, is now *
 * available and contains the CA role and document type information. *
 *

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>
 Uploading C:\Program Files\Stnexp\Queries\QUERIES\10612986.str



chain nodes :

7 14

ring nodes :

1 2 3 4 5 6 9 10 11 12 13

chain bonds :

1-7 4-9 12-14

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 9-10 9-13 10-11 11-12 12-13

exact/norm bonds :

1-7 4-9 9-10 9-13 12-14

exact bonds :

10-11 11-12 12-13

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :

containing 1 : 9 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 9:Atom 10:Atom 11:Atom

12:Atom 13:Atom 14:Atom

Generic attributes :

14:

Number of Carbon Atoms : less than 7

Number of Hetero Atoms : 2 or more

Element Count :

Node 14: Limited

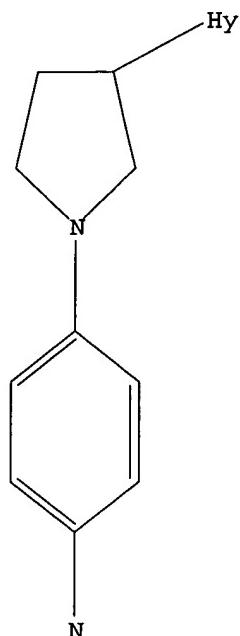
C,C3

N,N2

S,S0

O,O0

L22 HAS NO ANSWERS
L22 STR



Structure attributes must be viewed using STN Express query preparation.

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=> s 11
SAMPLE SEARCH INITIATED 13:14:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      85 TO ITERATE

100.0% PROCESSED      85 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
                      BATCH **COMPLETE**
PROJECTED ITERATIONS:    1147 TO    2253
PROJECTED ANSWERS:        0 TO      0
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L23 0 SEA SSS SAM L1

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=> s 11 full
FULL SEARCH INITIATED 13:14:36 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      1714 TO ITERATE
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```
100.0% PROCESSED      1714 ITERATIONS          0 ANSWERS
SEARCH TIME: 00.00.01
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L24 0 SEA SSS FUL L1

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=> s 122
SAMPLE SEARCH INITIATED 13:15:05 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      2680 TO ITERATE
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74.6% PROCESSED      2000 ITERATIONS          1 ANSWERS
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INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 50495 TO 56705
PROJECTED ANSWERS: 1 TO 95

L25 1 SEA SSS SAM L22

=> s l22 full
FULL SEARCH INITIATED 13:15:07 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 55930 TO ITERATE

100.0% PROCESSED 55930 ITERATIONS
SEARCH TIME: 00.00.01

46 ANSWERS

L26 46 SEA SSS FUL L22

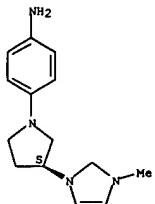
=> s l26 and caplus/lc
49740058 CAPLUS/LC
L27 29 L26 AND CAPLUS/LC

=> s l26 not l27
L28 17 L26 NOT L27

=> d l28 1-17

L28 ANSWER 1 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852803-70-4 REGISTRY
ED Entered STN: 23 Jun 2005
CN 1H-Imidazolium, 1-[(3S)-1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl- (9CI)
(CA INDEX NAME)
FS STEREOSEARCH
MF C14 H19 N4
CI COM
SR CA

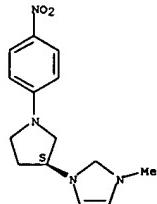
Absolute stereochemistry.



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

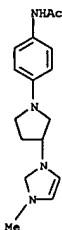
L28 ANSWER 2 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852619-39-7 REGISTRY
ED Entered STN: 21 Jun 2005
CN 1H-Imidazolium, 1-methyl-3-[(3S)-1-(4-nitrophenyl)-3-pyrrolidinyl]- (9CI)
(CA INDEX NAME)
FS STEREOSEARCH
MF C14 H17 N4 O2
CI COM
SR CA

Absolute stereochemistry.



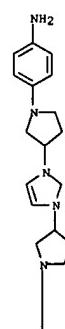
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L28 ANSWER 3 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 852615-58-9 REGISTRY
ED Entered STN: 21 Jun 2005
CN 1H-Imidazolium, 1-[(1-[4-(acetylamino)phenyl]-3-pyrrolidinyl)-3-methyl- (9CI) (CA INDEX NAME)
MF C16 H21 N4 O
CI COM
SR CA



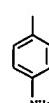
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 4 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 785775-69-1 REGISTRY
ED Entered STN: 22 Nov 2004
CN 1H-Imidazolium, 1,3-bis[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C23 H29 N6
CI COM
SR CA



PAGE 1-A

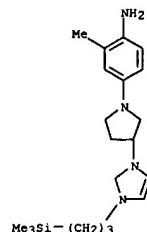
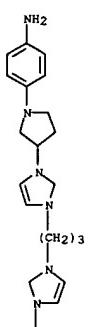
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE



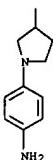
PAGE 2-A

L28 ANSWER 5 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 781613-57-8 REGISTRY
ED Entered STN: 16 Nov 2004
CN 1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C29 H38 N8
CI COM
SR CA

L28 ANSWER 6 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 778573-39-0 REGISTRY
ED Entered STN: 11 Nov 2004
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]- (9CI) (CA INDEX NAME)
MF C20 H33 N4 Si
CI COM
SR CA



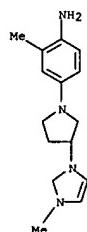
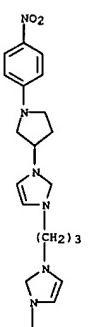
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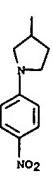
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L28 ANSWER 7 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 773847-98-6 REGISTRY
ED Entered STN: 02 Nov 2004
CN 1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-[1-(4-nitrophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C29 H34 N8 O4
CI COM
SR CA

L28 ANSWER 8 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 771473-53-1 REGISTRY
ED Entered STN: 28 Oct 2004
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
MF C15 H21 N4
CI COM
SR CA

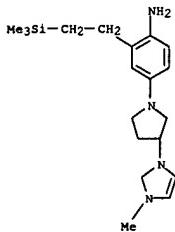


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

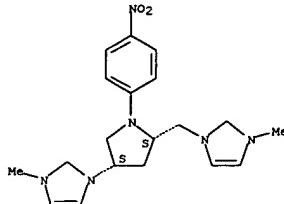
L28 ANSWER 9 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 769921-12-2 REGISTRY
ED Entered STN: 27 Oct 2004
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MF C19 H31 N4 Si
CI COM
SR CA



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 10 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 764662-26-2 REGISTRY
ED Entered STN: 18 Oct 2004
CN 1H-Imidazolium, 1-[(39,55)-5-[(3-methyl-1H-imidazolium-1-yl)methyl]-1-(4-nitrophenyl)-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H24 N6 O2
CI COM
SR CA

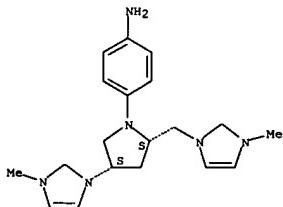
Absolute stereochemistry.



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

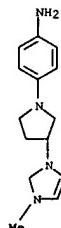
L28 ANSWER 11 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 764662-22-8 REGISTRY
ED Entered STN: 18 Oct 2004
CN 1H-Imidazolium,
1-[(3S,5S)-1-(4-aminophenyl)-5-[(3-methyl-1H-imidazolium-1-yl)methyl]-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C19 H26 N6
CI COM
SR CA

Absolute stereochemistry.



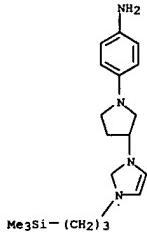
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L28 ANSWER 12 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 760171-36-6 REGISTRY
ED Entered STN: 11 Oct 2004
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MF C14 H19 N4
CI COM
SR CA



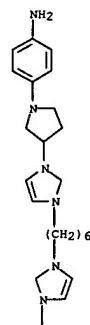
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 13 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 749205-99-0 REGISTRY
ED Entered STN: 22 Sep 2004
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]- (9CI) (CA INDEX NAME)
MF C19 H31 N4 Si1
CI COM
SR CA

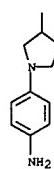


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 14 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 748768-65-2 REGISTRY
ED Entered STN: 21 Sep 2004
CN 1H-Imidazolium, 1,1'-(1,6-hexanediy1)bis[3-[1-(4-aminophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C32 H44 N8
CI COM
SR CA



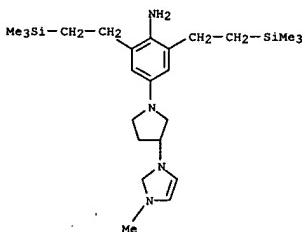
PAGE 1-A



PAGE 2-A

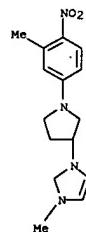
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L28 ANSWER 15 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 740082-89-7 REGISTRY
ED Entered STN: 06 Sep 2004
CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl- (9CI) (CA INDEX NAME)
MF C24 H43 N4 Si2
CI COM
SR CA



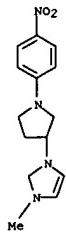
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 16 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607354-95-0 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-methyl-3-[1-(3-methyl-4-nitrophenyl)-3-pyrrolidinyl]- (9CI) (CA INDEX NAME)
MF C15 H19 N4 O2
CI COM
SR CA



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L28 ANSWER 17 OF 17 REGISTRY COPYRIGHT 2006 ACS on STN
RN 607354-83-6 REGISTRY
ED Entered STN: 21 Oct 2003
CN 1H-Imidazolium, 1-methyl-3-[1-(4-nitrophenyl)-3-pyrrolidinyl]- (9CI) (CA
INDEX NAME)
MF C14 H17 N4 O2
CI COM
SR CA



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

=> fil caplus			
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FULL ESTIMATED COST	371.38	1108.47	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL	
	ENTRY	SESSION	
CA SUBSCRIBER PRICE	0.00	-17.25	

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 FILE LAST UPDATED: 15 Feb 2006 (20060215/ED)

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 L3 STRUCTURE UPLOADED
 L4 0 S L1
 L5 0 S L1 FULL

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 SELECT L6 1 RN

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FILE 'REGISTRY' ENTERED AT 12:57:35 ON 16 FEB 2006

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 L9 8658 S L3 FULL
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 L11 303 S L10 FULL SUB=L9
 L12 205 S L11 AND CAPLUS/LC
 L13 STRUCTURE UPLOADED
 L14 239 S L13 FULL SUB=L11
 L15 0 S L14 AND CAPLUSL/C

L16 149 S L14 AND CAPLUS/LC
L17 STRUCTURE UPLOADED
L18 67 S L17 FULL SUB=L14
L19 47 S L18 AND CAPLUS/LC
L20 20 S L18 NOT L19

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L22 STRUCTURE UPLOADED
L23 0 S L1
L24 0 S L1 FULL
L25 1 S L22
L26 46 S L22 FULL
L27 29 S L26 AND CAPLUS/LC
L28 17 S L26 NOT L27

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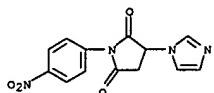
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L31 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1974:477923 CAPLUS
 DOCUMENT NUMBER: 81:77923
 TITLE: Imidazole derivatives
 INVENTOR(S): Hasegawa, Gen; Kotani, Akeshi
 PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 49049959	A2	19740515	JP 1972-93335	19720916
JP 55038949	B4	19801007		
			JP 1972-93335	A 19720916

PRIORITY APPN. INFO.:
 GI For diagram(s), see printed CA Issue.
 AB Imidazole derivs. [I: R = H, lower alkyl, cycloalkyl, aryl with or without substituents, aralkyl (substituents may be selected from halo, lower alkyl, lower alkoxy, lower alkoxycarbonyl, lower alkylthio, polyhalo lower alkyl, NO₂); X = H, lower alkyl, aryl] were prepared by reacting II with cis-HO₂CH:CHCONHR. I had anti-tremor, anti-convulsant, and fighting inhibitory actions. E.g., a mixture of 3.4 g imidazole and 5.0 g maleimide acid in DMF was refluxed 20 hr, 40 ml Ac₂O and 4 g AcONa were added, and the whole was refluxed 2 hr to give 2.1 g 1-imidazolylsuccinimide. Among 16 more I similarly prepared, were the following (R and X given): Bu, H; Ph, H; cyclododecyl, 2-Me; p-EtOC₆H₄, 4-Ph.
 IT 53616-14-1P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 53616-14-1 CAPLUS
 CN 2,5-Pyrrolidinedione, 3-(1H-imidazol-1-yl)-1-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



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FULL ESTIMATED COST	6.95	1115.42
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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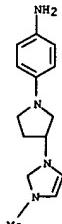
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L21 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:673828 CAPLUS
 DOCUMENT NUMBER: 143:179089
 TITLE: Hair dye composition containing an alcohol oxidase
 and a cationic oxidation base for dyeing keratin fibers
 INVENTOR(S): Plos, Gregory
 PATENT ASSIGNEE(S): L'Oréal, Fr.
 SOURCE: Fr. Demande, 48 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2865388	A1	20050729	FR 2004-775	20040128
EP 1559412	A1	20050803	EP 2005-290126	20050120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
US 2005257329	A1	20051124	US 2005-44080	20050128
PRIORITY APPLN. INFO.: FR 2004-775 A 20040128				
US 2004-544324P P 20040217				

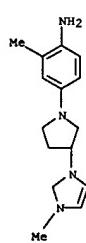
OTHER SOURCE(S): MARPAT 143:179089
 AB A composition for the dyeing of keratinous fibers, in particular of human keratinous fibers such as the hair, contains at least an alc. oxidase enzyme, a substrate for this enzyme, and at least a cationic oxidation base. A hair dye contained [1-(4-aminophenyl)-pyrrolidin-3-yl]-trimethylammonium chloride 3x10⁻³ mole, ethanol 25 g, meta-aminophenol 3x10⁻³ mole, alc. oxidase 20000 units, 2-amino-2-methyl-1-propanol q.s. pH = 7, and water q.s. 100 g.
 IT 607355-12-4 607355-16-0 607355-18-0
 607355-20-4 607355-21-5 701975-28-2
 701975-31-7
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dye composition containing alc. oxidase and cationic oxidation base for dyeing keratin fibers)
 RN 607355-12-4 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



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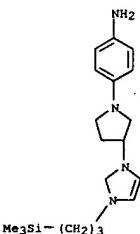
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 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

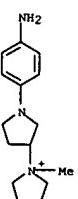
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L21 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

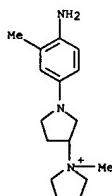


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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
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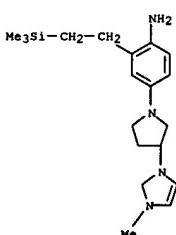


L21 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● Cl⁻

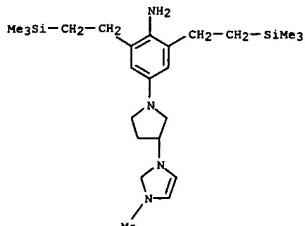
RN 701975-28-2 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

Process for the preparation of p-phenylenediamines comprising pyrrolidines substituted by nitrogen radicals and their intermediates via

cyclocondensation

of p-substituted anilines with 1,4-dihalo-2-butanoles

Bordier, Thierry; Xu, Jinzhu
L'oreal, Fr.

Eur. Pat. Appl., 41 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

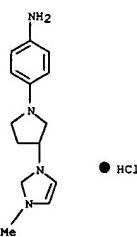
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FR 2862969	A1	20050603	FR 2003-50939	20031128
US 2005209466	A1	20050922	US 2004-995558	20041124
PRIORITY APPLN. INFO.:			FR 2003-50939	A 20031128

OTHER SOURCE(S): MARPAT 143:7491
GI

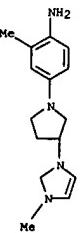
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention is related to the preparation of p-phenylenediamines I via cyclocondensation of p-substituted anilines II with 1,4-disubstituted-2-butanoles of formula Y-(CH₂)₂-CH(OH)-CH₂-Y [the carbon connecting R₂ to pyrrolidine ring is a chiral; n = 0-4; when n ≥ 2, R₁ = identical or different; R₁ = halo, linear or branched aliphatic hydrocarbyl, aryl, etc.]; R₁ cannot be a peroxide bond, N₃₊, NO₂, or NO; R₂ = (non)cationic N radical]. The advantages include elimination of 3-pyrrolidinol as starting material, use of cheap materials, and a viable industrial scale-up. Thus, cyclocondensation of 4-aminoacetanilide with 1,4-dibromo-2-butanol gave pyrrolidinol III in 72.7% yield. Activation of III with MeSO₂Cl, substitution with TMA in EtOH, and HCl-catalyzed deacetylation gave IV-Cl-HCl. IT 607354-86-9P, 3-[1-(4-Aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-imidazol-1-ium Chloride hydrochloride 607354-98-3P, 1-[1-(4-Amino-3-yl)pyrrolidin-3-yl]-3-methyl-1H-imidazol-3-ium chloride monohydrochloride 852615-62-4P, (1-(4-Aminophenyl)pyrrolidin-3-yl)piperidinium chloride monohydrochloride 852615-63-5P, (1-(4-Aminophenyl)pyrrolidin-3-yl)(methyl)piperidinium chloride monohydrochloride RL: IMF (Industrial manufacture); SFN (Synthetic preparation); PREP (Preparation) (preparation of p-phenylenediamines comprising pyrrolidines substituted by nitrogen radicals and their intermediates via cyclocondensation of

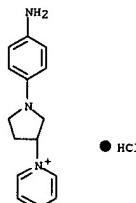
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)

● Cl⁻

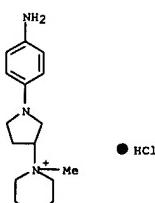
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607354-98-3 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 852615-62-4 CAPLUS

● Cl⁻

RN 852615-63-5 CAPLUS
 CN Piperidinium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-1-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)

● Cl⁻

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L21 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:467803 CAPLUS
 DOCUMENT NUMBER: 143:7490
 TITLE: Process for the preparation of optically active 1-(4-nitrophenyl)-3-pyrrolidinol derivatives without isolating (R)-3-pyrrolidinols intermediates, and para-phenylenediamines comprising chiral pyrrolidinyl groups for use in dyeing compositions for keratinous fibers
 INVENTOR(S): Bordier, Thierry; Xu, Jinzhu
 PATENT ASSIGNEE(S): L'oreal, Fr.
 SOURCE: Eur. Pat. Appl., 35 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1535904	A2	20050601	EP 2004-106111	20041126
EP 1535904	A3	20050713		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR, IS, YU				
FR 2862970	A1	20050603	FR 2003-50940	20031128
US 2005029464	A1	20050922	US 2004-995559	20041124
PRIORITY APPLN. INFO.:			FR 2003-50940	A 20031128
		US 2003-531966P	P	20031224

OTHER SOURCE(S): MARPAT 143:7490
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention is related to the preparation of optically active 1-(4-nitrophenyl)-3-pyrrolidinol derivs. (I) Without isolating (R)-3-pyrrolidinols intermediates by decarboxylation of trans-4-hydroxy-L-proline (II), amination of 4-halonitrobenzene III with II, followed by optionally inversion of configuration [n = 0-4; when n ≥ 2, R1 = identical or different; r1 = H, linear or branched aliphatic hydrocarbyl, aryl, etc.; R2 = (non)cationic nitrogen radical]. The invention is also related to the preparation of chiral amines IV and their use as oxidation bases in dyeing compns. for keratinous fibers and dyeing kit containing said compns. (no data). The advantages include reduced number of steps, high global yield, and simple process. For example, decarboxylation of II in NMP at 155 for 3 h and amination of 4-fluoroniobenzene with (R)-3-pyrrolidinol generated in-situ gave I (R1 = H). VcCl-eHCl was prepared in 3 steps by activation of I (R1 = H) with MeSO2Cl, substitution with N-methylimidazole, and hydrogenation over Pd/C.

IT 852619-37-5P
 RL: COS (Cosmetic use); IMF (Industrial manufacture); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of optically active 1-(4-nitrophenyl)-3-pyrrolidinols without

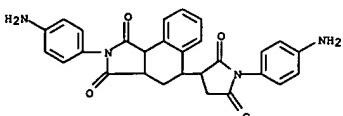
L21 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2005:118441 CAPLUS
 DOCUMENT NUMBER: 142:229090
 TITLE: Liquid crystal orientation agent, liquid crystal orientation film, and liquid crystal display element
 INVENTOR(S): Nutsumi, Yasuaki
 PATENT ASSIGNEE(S): JSC Ltd., Japan
 SOURCE: Jpn. Kokai Tokyo Koho, 28 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005037920	A2	20050210	JP 2004-183328	20040622
PRIORITY APPLN. INFO.:			JP 2003-178983	A 20030624

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Disclosed is the liquid crystal orientation agent containing ≥1 polymer selected from I-IV (Q, R = tetravalent organic group; and X, Y = divalent organic group).
 IT 842125-84-2
 RL: NUU (Other use, unclassified); USES (Uses)
 (liquid crystal orientation agent and film therefrom for LCD element)
 RN 842125-84-2 CAPLUS
 CN 1H-Benz[e]isoindole-1,3(2H)-dione,
 2-(4-aminophenyl)-5-(1-(4-aminophenyl)-
 2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro- (9CI) (CA INDEX NAME)



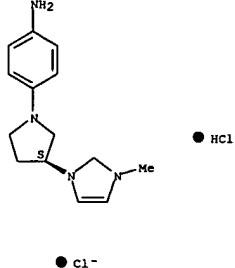
IT 842125-88-6P
 RL: NUU (Other use, unclassified); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (liquid crystal orientation agent and film therefrom for LCD element)
 RN 842125-88-6 CAPLUS
 CN Cyclobuta[1,2-c:3,4-c']difuranetetra-, tetrahydro-, polymer with
 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-
 tetrahydro-1H-benz[e]isoindole-1,3(2H)-dione (9CI) (CA INDEX NAME)

CM 1

CRN 842125-84-2

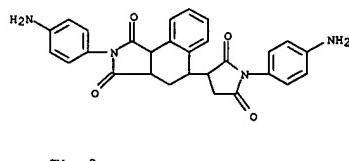
L21 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 isolating (R)-3-pyrrolidinols intermediates, and para-phenylenediamines comprising chiral pyrrolidinyl groups for use in dyeing compns. for keratinous fibers)
 RN 852619-37-5 CAPLUS
 CN 1H-Imidazolium, 1-[(3S)-1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

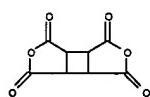


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L21 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CMF C28 H24 N4 O4



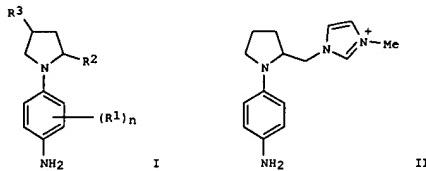
CM 2
 CRN 4415-87-6
 CMF C8 H4 O6



L21 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:796305 CAPLUS
 DOCUMENT NUMBER: 141:295851
 TITLE: Preparation of p-phenylenediamines with a disubstituted pyrrolidine group, bearing a cationic radical and their use for dyeing keratinic fibers
 INVENTOR(S): Ramos, Laure; Sabelle, Stephane
 PATENT ASSIGNEE(S): L'oreal, Fr.
 SOURCE: Eur. Pat. Appl., 32 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1462453	A1	20040929	EP 2004-290635	20040309
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
FR 2852953	A1	20041001	FR 2003-3873	20030328
JP 2004300155	A2	20041028	JP 2004-93404	20040326
US 2004248961	A1	20041209	US 2004-810814	20040329
			FR 2003-3873	A 20030328
PRIORITY APPLN. INFO.:			US 2003-469013P	P 20030509

OTHER SOURCE(S): MARPAT 141:295851
 GI

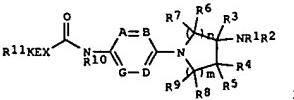


AB Title compds. I (wherein n = 0-4; when n ≥ 2, R1 can be identical or different; R1 = halo, Z, (un)saturated (un)substituted aliphatic or alicyclic hydrocarbyl, optionally containing one or more O, Si, S, or SO2; R1 is not -O-O-, diazo, nitro or nitroso; R2 = Z, CO2H and derivs., monocarbonyl/dialkyl/carbamoyl, etc.; R3 = Z, H, OH and derivs., NH2 and derivs., SH, CO2H and derivs., monocarbonyl/dialkylcarbamoyl, alkylsulfonyl, alky, etc.; provided that at least one of R2 and R3 is an onion radical; Z = onion radical selected from trialkylammonium, pyridinium, 1H-imidazol-1-ium; 3H-imidazol-1-ium, etc.; and their addition salts) were prepared as oxidation bases for dyeing keratinous fibers, in particular human

L21 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:696342 CAPLUS
 DOCUMENT NUMBER: 141:225302
 TITLE: Preparation of N-arylhetocycles as melanin concentrating hormone (MCH) antagonists.
 INVENTOR(S): Schwinn, Lothar; Stengelin, Siegfried; Gossel, Matthias; Boehme, Thomas; Hessler, Gerhard; Stahl, Petra; Gretzke, Dirk
 PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany
 SOURCE: PCT Int. Appl., 390 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004072025	A2	20040826	WO 2004-EP1342	20040213
WO 2004072025	A3	20041223		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, RW, BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SZ, SK, TR, BF, BU, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10306250	A1	20040909	DE 2003-10306250	20030214
CA 2516118	AA	20040826	CA 2004-2516118	20040213
EP 1597228	A2	20051123	EP 2004-710808	20040213
R: AT, BE, CH, DE, DK, ES, FR, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004220191	A1	20041104	US 2004-779853	20040217
NO 2005004220	A	20051028	NO 2005-4220	20050912
PRIORITY APPLN. INFO.:			DE 2003-10306250	A 20030214
			US 2003-488545P	P 20030718
			WO 2004-EP1342	W 20040213

OTHER SOURCE(S): MARPAT 141:225302
 GI



AB Title compds. I: R1, R2 = H, alkyl, alkoxyalkyl, aryloxyalkyl, alkylcarbonyl, alkenylcarbonyl, etc.; R1R2N = atoms to form a 4-10 membered mono-, bi-, or spirocyclic (substituted) ring; R3 = H, alkyl; R4, R5 = H, alkyl, OH, alkoxy, alkylcarbonyloxy, alkylthio; R6-R9 = H, alkyl; R6R7, R8R9 = O; A, B, D, G = N, CR42; AB, DG = CR42; R4 = H, F, Cl, Br,

L21 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 hair fibers. For example, II-Cl-HCl was prep'd., in 3 steps, via substitution of 2-chloromethyl-1-(4-nitrophenyl)pyrrolidine (prep'n given) in N-methylimidazole in toluene at reflux for 9 h, and hydrogenation of the nitro deriv. over Pd/C. Formulations of II-Cl-HCl in acidic medium gave blue-violet and gray shades.

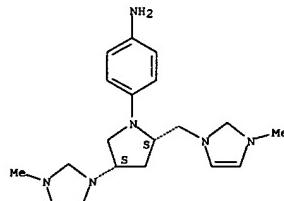
IT 764662-23-9
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses); (oxidation base in dyeing; preparation of p-phenylenediamines with a disubstituted pyrrolidine group, bearing a cationic radical and their use for dyeing keratinic fibers)

RN 764662-23-9 CAPLUS
 CN 1H-Imidazolium,
 1-[{(3S,5S)-1-(4-aminophenyl)-5-[(3-methyl-1H-imidazolium-1-yl)methyl]-3-pyrrolidinyl]-3-methyl-, dimethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 764662-22-8
 CMF C19 H26 N6

Absolute stereochemistry.



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

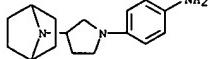
CRN 16053-58-0
 CMF C H3 O3 S



L21 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 iodoo, Cf3, NO2, cyano, OCf3, alkoxy, alkylthio, cycloalkyl, cycloalkoxy, cycloalkenyl, alkylnyl, CO2H, etc.; R10 = H, alkyl, alkenyl, alkynyl; X = NR2, O, bond, C:C, C:tpbond:C, etc.; R52 = H, alkyl; E = (substituted) C3-1 carbocycl, heterocycl; K = bond, O, CH2O, S, SO, CO, C:C, C:tpbond:C, etc.; R11 = H, alkyl, alkoxyalkyl, alkenyl, 3-10 membered (substituted) mono-, bi-, tri- or spirocyclic ring; EKR11 = (unsatd.) tricyclic ring; m, n = 0-2; were prep'd. Thus, N-1-(4-aminophenyl)pyrrolidin-3-yl)pyrrolidine was treated with carbonyldimidazole and then with 4-(4-chlorophenyl)piperidine to give 4-(4-chlorophenyl)piperidine-1-carboxylic acid [4-(3-(acetylthiomethylamino)pyrrolidin-1-yl)phenyl]amide. The latter at 30 mg/kg orally in female NNRI mice reduced milk consumption by 64%.

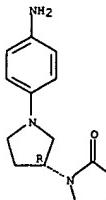
IT 748183-30-4P 748183-31-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (Preparation of N-arylhetocycles as MCH antagonists)

RN 748183-30-4 CAPLUS
 CN Benzenamine, 4-[3-(7-azabicyclo[2.2.1]hept-7-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)



RN 748183-31-5 CAPLUS
 CN [1,3'-Bipyrrolidin]-2-one, 1'-(4-aminophenyl)-, (3'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



ACCESSION NUMBER: 2004:482172 CAPLUS

DOCUMENT NUMBER: 141:42544

TITLE: Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a vitamin derivative

INVENTOR(S): Cottaret, Jean; Lagrange, Alain

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 52 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428517	A1	20040616	EP 2003-293142	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848431	A1	20040618	FR 2002-15764	20021213
US 2004205904	A1	20041021	US 2003-735291	20031212
PRIORITY APPLN. INFO.:			FR 2002-15764	A 20021213
		US 2003-444634P		P 20030204

OTHER SOURCE(S): MARPAT 141:42544

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a vitamin derivative. Thus, a composition contained oleyl alc.

6, oleic acid 3, diglyceryl oleyl ether 6, hexaglyceryl oleyl ether 6, diethylaminopropyl laurylaminosuccinate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, propylene glycol 20, dlinoleic acid 1.5, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5,

niacinamide

0.2, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition

was mixed with 6% H2O2 and applied onto hair.

IT 607355-12-2 607355-16-8 607355-18-0

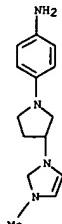
607355-19-1 607355-20-4 607355-21-5

701975-28-2 701975-31-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and vitamin derivative)

RN 607355-12-4 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

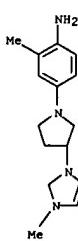


● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-16-8 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

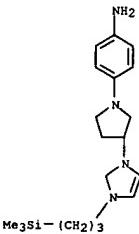


● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-18-0 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

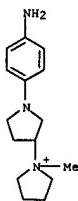


● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-19-1 CAPLUS

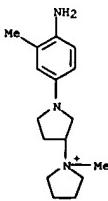
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)



● Cl-

RN 607355-21-5 CAPLUS

CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl-

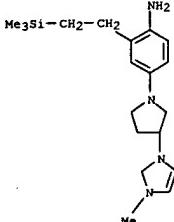
RN 701975-28-2 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

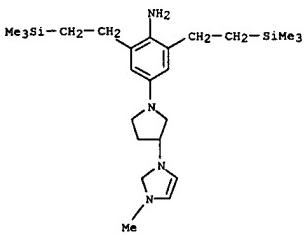
RN 607355-20-4 CAPLUS

CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



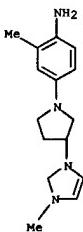
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



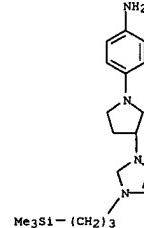
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-18-0 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:482171 CAPLUS
 DOCUMENT NUMBER: 141:42543
 TITLE: Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a polyol ester
 INVENTOR(S): Cotteret, Jean; Lagrange, Alain
 PATENT ASSIGNEE(S): L'oreal, Fr.
 SOURCE: Eur. Pat. Appl., 49 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

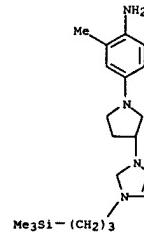
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428516	A1	20040616	EP 2003-293141	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848443	A1	20040618	FR 2002-15776	20021213
US 2004211010	A1	20041028	US 2003-734612	20031212
			PRIORITY APPLN. INFO.:	
			FR 2002-15776	A 20021213
			US 2003-444625P	P 20030204

OTHER SOURCE(S): MARPAT 141:42543
 AB Hair dyeing compns. comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a polyol ester. Thus, a composition contained oleyl alc.
 4, oleic acid 5, diglyceryl oleyl ether 4, tetraglyceryl oleyl ether 3.6, ethoxylated amino acid 8, ethoxylated oleylamine 4, ethoxylated decyl ether 2.7, PEG olate 2.5., adipic acid 1.3, reducing agents 0.63, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 0.8, 5-N(B-hydroxyethyl)amino-2-methylphenol 0.4, perfume qs, ammonia 10, and water qs to 100 g. The above composition was mixed with 6% H₂O₂ and applied onto hair.
 IT 607355-12-4 607355-18-0
 607355-19-1 607355-20-4 607355-21-5
 701975-28-2 701975-31-7
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. comprising cationic phenylenediamine with pyrrolidine ring and polyol ester)
 RN 607355-12-4 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



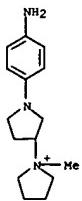
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-19-1 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

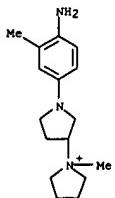


● Cl-

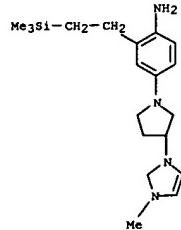
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-20-4 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

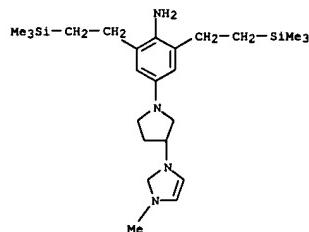
RN 607355-21-5 CAPLUS
CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 701975-28-2 CAPLUS
CN 1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 701975-31-7 CAPLUS
CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis(2-(trimethylsilyl)ethyl)phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
FORMAT

ACCESSION NUMBER: 2004:492170 CAPLUS

DOCUMENT NUMBER: 141:42542

TITLE: Hair dyeing compositions comprising a tertiary cationic p-phenylenediamine with a pyrrolidinyl ring and a surfactant

INVENTOR(S): Cotteret, Jean; Lagrange, Alain

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 53 pp.

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428515	A1	20040616	EP 2003-293140	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848437	A1	20040618	FR 2002-15770	20021213
US 2004216243	A1	20041104	US 2003-735262	20031212
PRIORITY APPLN. INFO.:			FR 2002-15770	A 20021213
		US 2003-444654P	P 20030204	

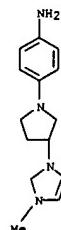
OTHER SOURCE(S): MARPAT 141:42542

AB Hair dyeing compns. comprise a tertiary cationic p-phenylenediamine with a pyrrolidinyl ring and a surfactant such as a glycerol ether. Thus, a composition contained oleyl alc. 6, oleic acid 3, diglyceryl oleyl ether 6, hexaglyceryl oleyl ether 6, diethylaminopropyl laurylaminosuccinate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, hexylene glycol 20, reducing agents 0.915, sequestrants 1, resorcinol 0.085, (1-(4-aminophenyl)pyrrolidin-3-yl)trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 6% H₂O₂ and applied onto hair.

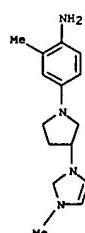
IT 607355-12-4 607355-16-8 607355-19-0
607355-19-1 607355-20-4 607355-21-5
701975-28-2 701975-31-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dyeing compns. comprising cationic phenylenediamine with pyrrolidinyl ring and surfactant)

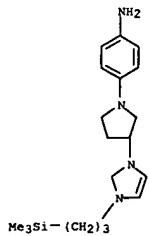
RN 607355-12-4 CAPLUS
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

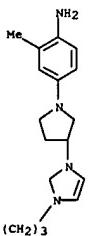
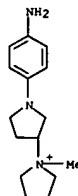
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-16-8 CAPLUS
CN 1H-Imidazolium, 1-[1-[4-amino-3-methylphenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

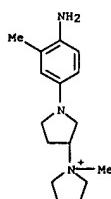
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 607355-18-0 CAPLUS
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-19-1 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

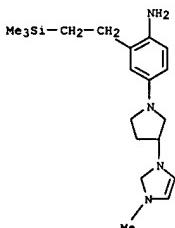
Me₃Si-(CH₂)₃● Cl⁻

RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

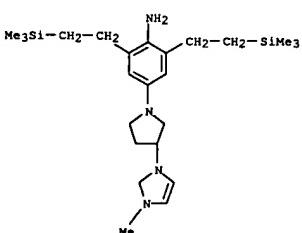
● Cl⁻

RN 701975-28-2 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-20-4 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

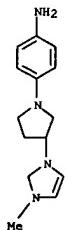
L21 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:482169 CAPLUS
 DOCUMENT NUMBER: 141:42541
 TITLE: Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a benzomorpholine coupler
 INVENTOR(S): Cottard, Francois; Rondeau, Christine
 PATENT ASSIGNEE(S): L'oreal, Fr.
 SOURCE: Eur. Pat. Appl., 53 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428514	A1	20040616	EP 2003-293139	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848441	A1	20040618	FR 2002-15774	20021213
FR 2848441	B1	20050304		
US 2004205903	A1	20041021	US 2003-735288	20031212
			FR 2002-15774	A 20021213
			US 2003-450331P	P 20030228

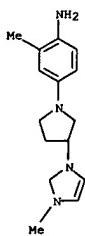
PRIORITY APPLN. INFO.: AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a benzomorpholine coupler. Thus, a composition contained oleyl alc. 6, oleic acid 3, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, propylene glycol 20, reducing agents 0.915, sequestrants 1, p-aminophenol 0.2, [(1-(4-aminophenyl)-3-pyrrolidinyl)-trimethylammonium chloride 0.3, N,N-(2-Hydroxyethyl)-p-phenylenediamine sulfate 0.3, 6-hydroxybenzomorpholine 0.45, perfume qs, ammonia 10.2, and water qs to 100 g.

IT 607355-12-4 607355-16-0 607355-18-0
 607355-19-1 607355-20-4 607355-21-5
 701975-28-2 701975-31-7
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. comprising cationic phenylenediamine with pyrrolidine ring and benzomorpholine coupler)

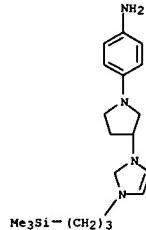
RN 607355-12-4 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

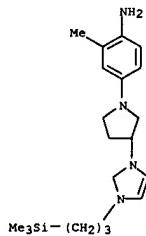
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

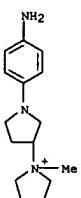
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-18-0 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

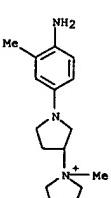
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-19-1 CAPLUS
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● Cl⁻

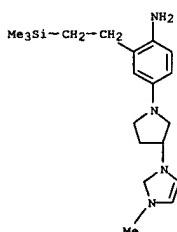
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
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 CN 1,3'-Bipyrrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

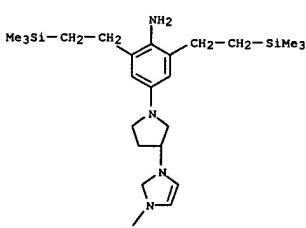
RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 701975-28-2 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2004:482168 CAPLUS

DOCUMENT NUMBER: 141:42540

TITLE: Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a opacifying or pearlescent agent

INVENTOR(S): Cottaret, Jean; Lagrange, Alain

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 50 pp.

CODEN: EPXKDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428513	A1	20040616	EP 2003-293138	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848440	A1	20040618	FR 2002-15773	20021213
US 2004250356	A1	20041216	US 2003-735258	20031212
PRIORITY APPLN. INFO.:			FR 2002-15773	A 20021213
		US 2003-450353P		P 20030228

OTHER SOURCE(S): MARPAT 141:42450

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a opacifying or pearlescent agent. Thus, a composition

contained Nafoil 20-22 3, Marlipal-2022/300 1, ethoxylated stearyl alc. 6.25, oleic acid 2.6, carbopol-980 0.6, Aculyn-44 4, Flonac FS20C 0.25, coco fatty acid monoisopropanolamide 3, cationic polymer 4, propylene glycol 6, sodium metasulfite 0.71, EDTA 0.2, tert-butylhydroquinone 0.3, 3-[1-(4-aminophenyl)pyrrolidin-3-yl]-1-methyl-3H-1-imidazolium chloride 0.8, 5-N(p-hydroxyethyl)kanano-2-methylphenol 0.4, monoethanolamine 1, perfume qs, ammonia 11, and water qs to 100 g. The above composition was mixed

with 6% H2O2 and applied onto hair.

IT 607355-12-4 607355-16-8 607355-18-0

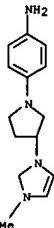
607355-19-1 607355-20-4 607355-21-5

701975-28-2 701975-31-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and opacifying or pearlescent agents)

RN 607355-12-4 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

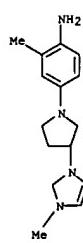


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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-16-8 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

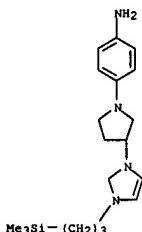


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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-18-0 CAPLUS

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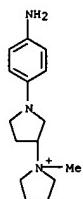


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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-19-1 CAPLUS

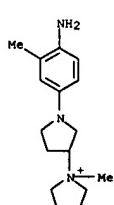
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-(3-trimethylsilylpropyl)-, chloride (9CI) (CA INDEX NAME)



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RN 607355-21-5 CAPLUS

CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl-

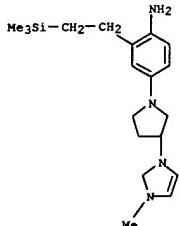
RN 701975-28-2 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-amino-3-[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

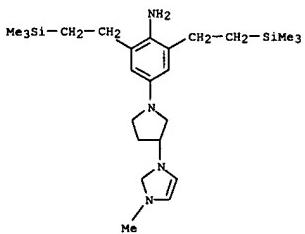
RN 607355-20-4 CAPLUS

CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)



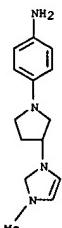
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



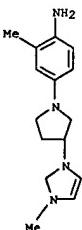
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



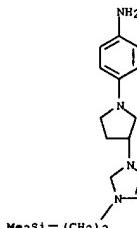
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-18-0 CAPLUS
 CN 1H-Imidazolium, 1-(1-(4-aminophenyl)-3-pyrrolidinyl)-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004-492167 CAPLUS
 DOCUMENT NUMBER: 141:42539
 TITLE: Hair dyeing compositions comprising a tertiary cationic p-phenylenediamine with a pyrrolidine ring and a p-aminophenol
 INVENTOR(S): Cotteret, Jean; Lagrange, Alain
 PATENT ASSIGNEE(S): L'oreal, Fr.
 SOURCE: Eur. Pat. Appl., 51 pp.
 CODEN: EPXKDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

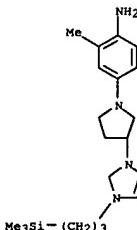
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428512	A1	20040616	EP 2003-293137	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848436	A1	20040618	FR 2002-15769	20021213
US 2004216245	A1	20041104	US 2003-735284	20031212
PRIORITY APPLN. INFO.:			FR 2002-15769	A 20021213
			US 2003-451255P	P 20030304

OTHER SOURCE(S): MARPAT 141:42539
 AB Hair dyeing compns. comprise a tertiary cationic p-phenylenediamine with a pyrrolidine ring and a p-aminophenol. Thus, a composition contained oleyl alc., 6, oleic acid 3, polyglycerol oleyl ether 12, diethylaminopropyl laurylaminosuccinate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, glycol 20, reducing agents 0.915, sequestrants 1, a p-aminophenol 0.2, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 0.8, 2-methyl-5-aminophenol 0.5, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 6% H₂O₂ and applied onto hair.
 IT 607355-12-4 607355-16-0 607355-18-0
 607355-19-1 607355-20-0 607355-21-5
 701975-28-2 701975-31-7
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. comprising cationic phenylenediamine with pyrrolidine ring and Aminophenol)
 RN 607355-12-4 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



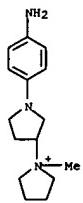
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-19-1 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-(3-(trimethylsilyl)propyl)-, chloride (9CI) (CA INDEX NAME)

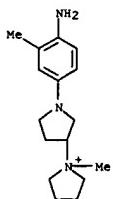


● Cl-

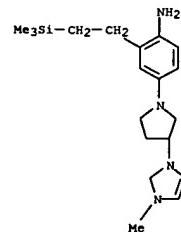
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-20-4 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

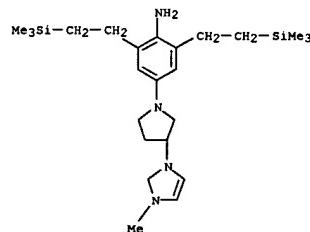
RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 701975-28-2 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3-(2-(trimethylsilyl)ethyl)phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

ACCESSION NUMBER: 2004-482166 CAPLUS

DOCUMENT NUMBER: 141:42538

TITLE: Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a cationic polymer

INVENTOR(S): Cotteret, Jean; Lagrange, Alain

PATENT ASSIGNEE(S): L'oreal, Fr

SOURCE: Eur. Pat. Appl., 49 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

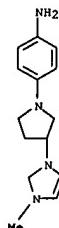
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428511	A1	20040618	EP 2003-203136	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848432	A1	20040618	FR 2002-15765	20021213
US 2004231068	A1	20041125	US 2003-735249	20031212
PRIORITY APLN. INFO.:			FR 2002-15765	A 20021213
		US 2003-450326P	P	20030228

OTHER SOURCE(S): MARPAT 141:42538

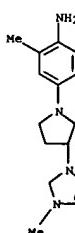
AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a cationic polymer. Thus, a composition contained oleic acid 9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, hexylene glycol 20, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 1.0, 2-methyl-4-aminophenol 0.5, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 6% H2O2 and applied onto hair.

IT 607355-12-4 607355-16-0 607355-18-0
 607355-19-1 607355-20-0 607355-21-5
 701975-28-2 701975-31-7
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and cationic polymer)

RN 607355-12-4 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

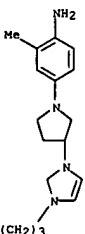
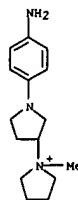
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3-methylphenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

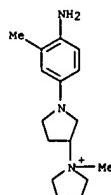
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-18-0 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-(3-trimethylsilylpropyl)-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-19-1 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻● Cl⁻

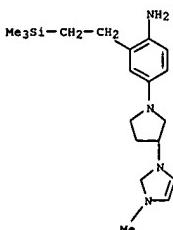
RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

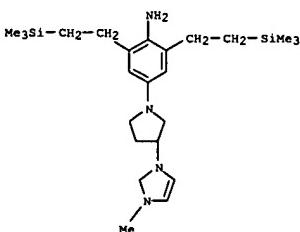
RN 701975-28-2 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-20-4 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

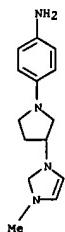
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

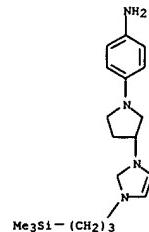
L21 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:462165 CAPLUS
 DOCUMENT NUMBER: 141:59175
 TITLE: Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a heterocyclic coupler or a hydroxybenzamide
 INVENTOR(S): Cotteret, Jean; Lagrange, Alain
 PATENT ASSIGNEE(S): L'Oréal, Fr.
 SOURCE: Eur. Pat. Appl., 59 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428510	A1	20040616	EP 2003-293135	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848434	A1	20040618	FR 2002-15767	20021213
US 2004231067	A1	20041125	US 2003-734750	20031212
PRIORITY APPLN. INFO.:			FR 2002-15767	A 20021213
			US 2003-450322P	P 20030228

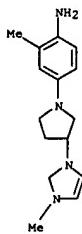
OTHER SOURCE(S): MARPAT 141:59175
 AB: Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a heterocyclic coupler or a hydroxybenzamide. Thus, a composition contained oleyl alc. 6, oleic acid 3, polyglycerol oleyl ether 12, diethylaminopropyl laurylaminosuccinate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, hexylene glycol 20, reducing agents 0.915, sequestrants 1, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 0.8, 6-methoxy-2,3-diaminopyridine 0.5, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 6% H2O2 and applied onto hair.
 IT 607355-12-4 607355-16-8 607355-18-0
 607355-19-1 607355-20-4 607355-21-5
 701975-28-2 701975-31-7
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and heterocyclic coupler or hydroxybenzamide)
 RN 607355-12-4 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

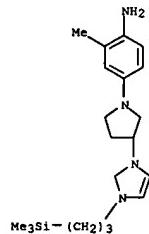
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

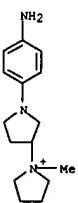
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-19-1 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-(3-trimethylsilylpropyl)-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

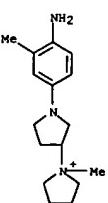
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-18-0 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-(3-(trimethylsilylpropyl)-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

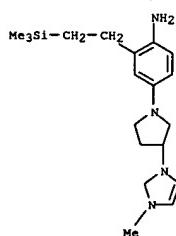
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-20-4 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

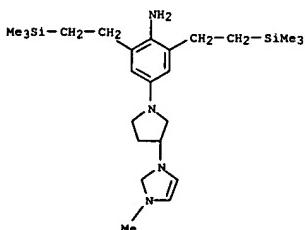
RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 701975-28-2 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3-(2-(trimethylsilyl)ethyl)phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis(2-(trimethylsilyl)ethyl)phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

ACCESSION NUMBER: 2004:482164 CAPLUS

DOCUMENT NUMBER: 141:42537

TITLE: Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a polyol

INVENTOR(S): Cotteret, Jean; Lagrange, Alain

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 50 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428509	A1	20040616	EP 2003-293134	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848438	A1	20040618	FR 2002-15771	20021213
US 2004226109	A1	20041118	US 2003-734653	20031212
PRIORITY APPLN. INFO.:			FR 2002-15771	A 20021213
		US 2003-444648P	P	20030204

OTHER SOURCE(S): MARPAT 141:42537

AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a polyol. Thus, a composition contained oleic acid

9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleyamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, hexylene glycol 20, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 6% H2O2 and applied onto hair.

IT 607355-12-4 607355-16-8 607355-18-0

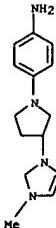
607355-19-1 607355-20-4 607355-21-5

701975-28-2 701975-31-7

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and polyol)

RN 607355-12-4 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

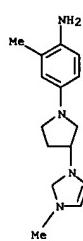


● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-16-8 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

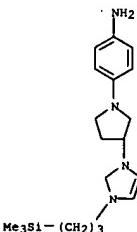


● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-18-0 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-(3-(trimethylsilyl)propyl)-, chloride (9CI) (CA INDEX NAME)

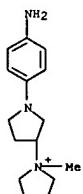


● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-19-1 CAPLUS

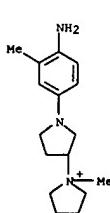
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)



● Cl-

RN 607355-21-5 CAPLUS

CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl-

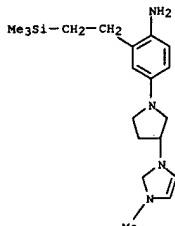
RN 701975-28-2 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-amino-3-[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

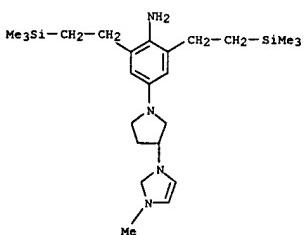
RN 607355-20-4 CAPLUS

CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3,5-bis(2-(trimethylsilyl)ethyl)phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



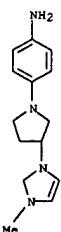
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:482163 CAPLUS
 DOCUMENT NUMBER: 141:42536
 TITLE: Hair dyeing compositions comprising a tertiary p-phenylenediamine with a pyrrolidine ring and a monosaccharide or disaccharide
 INVENTOR(S): Cotteret, Jean; Lagrange, Alain
 PATENT ASSIGNEE(S): L'oreal, Fr.
 SOURCE: Eur. Pat. Appl., 50 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

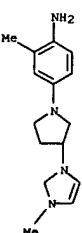
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428508	A1	20040616	EP 2003-293133	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848442	A1	20040618	FR 2002-15775	20021213
US 2004221400	A1	20041111	US 2003-735292	20031212
PRIORITY APPLN. INFO.:			FR 2002-15775	A 20021213
			US 2003-444623P	P 20030204

OTHER SOURCE(S): MARPAT 141:42536
 AB Hair dyeing compns. comprise a tertiary p-phenylenediamine with a pyrrolidine ring and a monosaccharide or disaccharide. Thus, a composition contained oleic acid 9, polyglycerol oleyl ether 12, diethylaminopropyl laurylaminosuccinate sodium salt 3, ethoxylated oleylanamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, hexylene glycol 20, reducing agents 0.915, saccharose 1, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, perfume q.s., ammonia 10.2, and water q.s. to 100 g. The above composition was mixed with 6% H2O2 and applied onto hair.
 IT 607355-12-4 607355-16-8 607355-18-0
 607355-19-1 607355-20-4 607355-21-5
 701975-28-2 701975-31-7
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. comprising phenylenediamine with pyrrolidine ring and monosaccharide or disaccharide)
 RN 607355-12-4 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



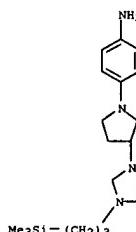
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



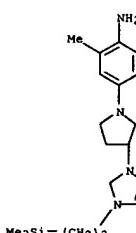
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-18-0 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)



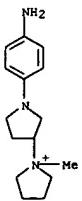
● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-19-1 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

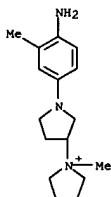


● Cl-

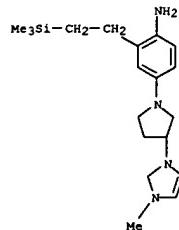
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-20-4 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

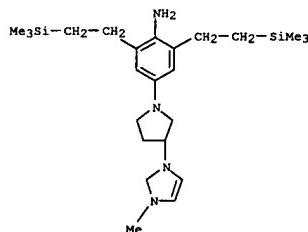
RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 701975-28-2 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE
 FORMAT

ACCESSION NUMBER: 2004:482162 CAPLUS

DOCUMENT NUMBER: 141:42535

TITLE: Hair dyeing composition comprising a cationic p-phenylenediamine with a pyrrolidine ring and a dicarboxylic acid

INVENTOR(S): Göttert, Jean; Lagrange, Alain

PATENT ASSIGNEE(S): L'Oréal, Fr.

SOURCE: Eur. Pat. Appl., 50 pp.

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1426507	A1	20040616	EP 2003-293132	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 20040435	A1	20040618	FR 2002-15768	20021213
US 2004216244	A1	20041104	US 2003-735273	20031212
PRIORITY APPLN. INFO.:			FR 2002-15768	A 20021213
		US 2003-450344P		P 20030228

OTHER SOURCE(S): MARPAT 141:42535

AB Hair dyeing compns. comprise a cationic p-phenylenediamine with a pyrrolidine ring and a dicarboxylic acid. Thus, a composition contained oleic

acid 9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanamide 10, ammonium acetate 20, propylene glycol 20, dillnoic acid 1.5, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, perfume

qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 61

H2O2 and applied onto hair.

IT 607355-12-4 607355-16-8 607355-18-0

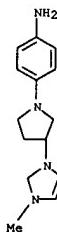
607355-19-1 607355-20-4 607355-21-5

701975-28-2 701975-31-7

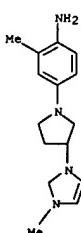
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing composition comprising cationic phenylenediamine with pyrrolidine ring and dicarboxylic acid)

RN 607355-12-4 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

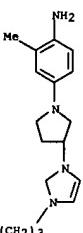
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

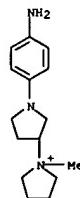
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-18-0 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

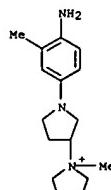
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-19-1 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)



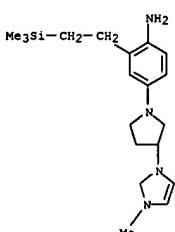
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-20-4 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

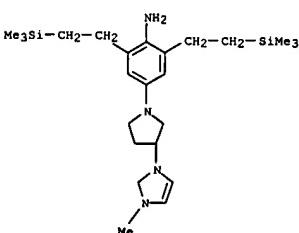
RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 701975-28-2 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3-[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

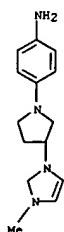
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

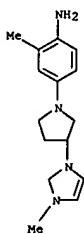
L21 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:482161 CAPLUS
 DOCUMENT NUMBER: 141-42534
 TITLE: Hair dyeing composition comprising p-phenylenediamine with a pyrrolidine ring and a polymer
 INVENTOR(S): Cotteret, Jean; Lagrange, Alain
 PATENT ASSIGNEE(S): L'oreal, Fr.
 SOURCE: Eur. Pat. Appl., 53 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428506	A1	20040616	EP 2003-292131	20031212
R: AF, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848433	A1	20040618	FR 2002-15766	20021213
US 2004216246	A1	20041104	US 2003-73524	20031212
PRIORITY APPLN. INFO.:			FR 2002-15766	A 20021213
			US 2003-450338P	P 20030228

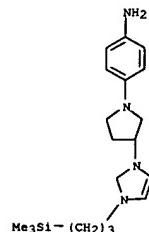
AB Hair dyeing composition comprise p-phenylenediamine with a cationic pyrrolidine ring and a polymer with fatty chains. Thus, a composition contained oleic acid 9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, hexylene glycol 20, reducing agents 0.915, sequestrants 1, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 0.8, ACP-1234 0.2, 2-methyl-5-aminophenol 0.5, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition was mixed with 6% H2O2 and applied onto hair.
 IT 607355-12-4 607355-16-8 607355-18-0
 607355-19-1 607355-20-4 607355-21-5
 701975-28-2 701975-31-7
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing composition comprising phenylenediamine with pyrrolidine ring and polymer)
 RN 607355-12-4 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

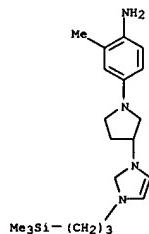
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

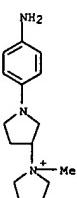
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-0 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

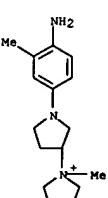
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-19-1 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

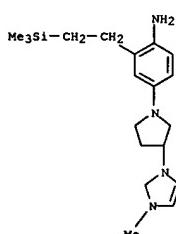
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-20-4 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

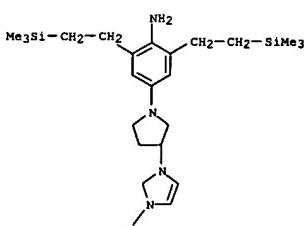
RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

RN 701975-20-2 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2004:482160 CAPLUS

DOCUMENT NUMBER: 141:42533

TITLE: Hair dyeing compositions comprising a cationic tertiary p-phenylenediamine with a pyrrolidine ring and a cationic heterocyclic direct dye

INVENTOR(S): Cotteret, Jean; Lagrange, Alain

PATENT ASSIGNEE(S): L'oreal, Fr.

SOURCE: Eur. Pat. Appl., 104 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1428505	A1	20040616	EP 2003-299130	20031212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2848439	A1	20040618	FR 2002-15772	20021213
US 2004221399	A1	20041111	US 2003-735259	20031212
			FR 2002-15772	A 20021213
PRIORITY APPLN. INFO.:			US 2003-444641P	P 20030204

OTHER SOURCE(S): MARPAT 141:42533

AB Hair dyeing compns. comprise a cationic tertiary p-phenylenediamine with a

pyrrolidine ring and a cationic heterocyclic direct dye. Thus, a composition

contained oleic acid 9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylaminosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, propylene glycol 20, dilauroleic acid 1.5, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-

yltrimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5,

niacinamide 0.2, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition

(50 g) was mixed with oxygenated water and 0.2 g Basic Red-51.

IT 607355-12-4 607355-16-8 607355-18-0

607355-19-1 607355-20-4 607355-21-5

701975-28-2 701975-31-7

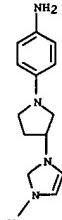
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair dyeing compns. comprising cationic tertiary phenylenediamine with

pyrrolidine ring and cationic heterocyclic direct dye)

RN 607355-12-4 CAPLUS

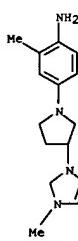
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-16-8 CAPLUS

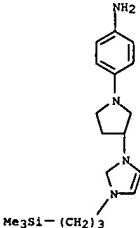
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-18-0 CAPLUS

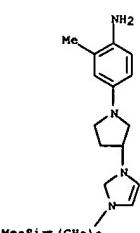
CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-(3-trimethylsilylpropyl)-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 607355-19-1 CAPLUS

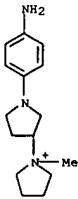
CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-(3-trimethylsilylpropyl)-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

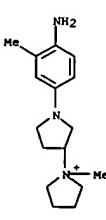
RN 607355-20-4 CAPLUS

CN 1,3'-Bipyrrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

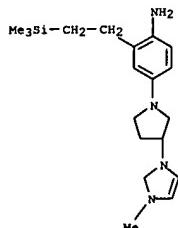
RN 607355-21-5 CAPLUS

CN 1,3'-Bipyrrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

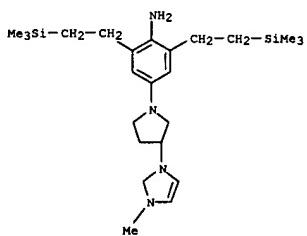
● Cl⁻

RN 701975-28-2 CAPLUS

CN 1H-Imidazolium, 1-[1-(4-amino-3-(2-(trimethylsilyl)ethyl)phenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

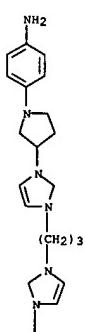
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 701975-31-7 CAPLUS
 CN 1H-Imidazolium, 1-[1-[4-amino-3,5-bis[2-(trimethylsilyl)ethyl]phenyl]-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)

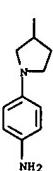
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L21 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 study); PREP (Preparation); USES (uses)
 (oxidn. base in dyeing; prepn. of bis-paraphenylenediamines comprising pyrrolidine groups as dyes for keratinic fibers)
 RN 667914-90-1 CAPLUS
 CN 1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-[1-(4-aminophenyl)-3-pyrrolidinyl]-, dichloride, dihydrobromide (9CI) (CA INDEX NAME)



PAGE 1-A

● 2 Br⁻

● 2 HBr

L21 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:200101 CAPLUS
 DOCUMENT NUMBER: 140:235596
 TITLE: Preparation of bis-paraphenylenediamines comprising pyrrolidine groups and their use as dyes for keratinic fibers
 INVENTOR(S): Sabelle, Stephane; Ramos, Laure; Leduc, Madeleine
 PATENT ASSIGNEE(S): L'Oreal, Fr.
 SOURCE: Eur. Pat. Appl., 15 pp.
 CODEN: EPXKDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1396486	A1	20040310	EP 2003-292177	20030904
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2844271	A1	20040312	FR 2002-11133	20020909
US 2004123401	A1	20040701	US 2003-657245	20030909
US 6923835	B2	20050802		
PRIORITY APPLN. INFO.:			FR 2002-11133	A 20020909
			US 2002-431713P	P 20021209

OTHER SOURCE(S): MARPAT 140:235596
 GI

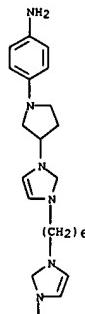
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I (wherein n, n' = independently 0-4; when n, n' ≥ 2, R1 and R2 can be identical or different; R1, R2 = independently H, (un)substituted aliphatic, alicyclic, saturated or unsatd. hydrocarbon chain with at least one carbon replaced by one or more O, N, Si, S, SO, or SO₂; R1 and R2 never include peroxide bond, diazo, NO₂, or NO; A = covalent bond or (un)substituted alkylene chain with at least one carbon replaced by an ammonium radical and/or by O, S, SiN, CO, SO, SO₂; R6, R7 = independently H, CO₂H and derivs., alkyl/dialkyl/carbamoyl, trialkylsilane, trialkylammonium, N-alkylimidazolium, (un)substituted alkyl, R8, R9 = independently H, OH, alkoxy, monalkyl/dialkyl/amino, thiol, CO₂H and derivs., alkyl/dialkyl/carbamoyl, trialkylsilane, trialkylammonium, N-alkylimidazolium, (un)substituted alkyl) were prepared as oxidation bases for dyeing keratinous fibers, in particular human hair fibers. For example, II-C1-e2HCl was prepared alkylation of [1-(4-nitrophenyl)pyrrolidin-3-yl]dimethylamine with 1,6-dibromohexane in MeOH at reflux for 6 h, followed by Pd/C hydrogenation at 10 Barr and 65°. Formulations of II in acidic medium gave blue-violet shades. IT 667914-90-1B 667914-95-6B 667914-96-7B, 1,3-Bis[1-(4-aminophenyl)pyrrolidin-3-yl]-1H-imidazol-3-ium chloride 667914-97-8B, 1,4-Bis[1-(4-aminophenyl)pyrrolidin-3-yl]-1,4-dimethylpiperazinedium dichloride 667914-99-0P 667915-11-9B 667915-25-5P RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological

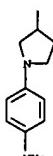
L21 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 667914-95-6 CAPLUS
 CN 1H-Imidazolium, 1,1'-(1,6-hexanediyi)bis[3-[1-(4-aminophenyl)-3-pyrrolidinyl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

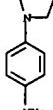
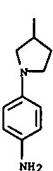


PAGE 2-A

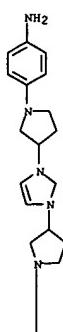


PAGE 2-A

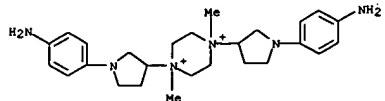
PAGE 2-A

● 2 Cl⁻

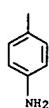
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 667914-96-7 CAPLUS
 CN 1H-Imidazolium, 1,3-bis(1-(4-aminophenyl)-3-pyrrolidinyl)-, chloride (9CI)



PAGE 1-A

●2 Cl⁻

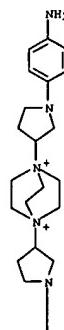
RN 667914-99-0 CAPLUS
 CN 1,4-Diazoniabicyclo(2.2.2)octane, 1,4-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-, dichloride (9CI) (CA INDEX NAME)



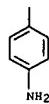
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● Cl⁻

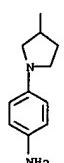
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 667914-97-8 CAPLUS
 CN Piperazinium, 1,4-bis[1-(4-aminophenyl)-3-pyrrolidinyl]-1,4-dimethyl-, dichloride (9CI) (CA INDEX NAME)



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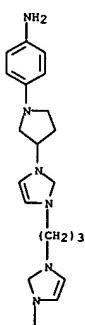
PAGE 2-A

●2 Cl⁻

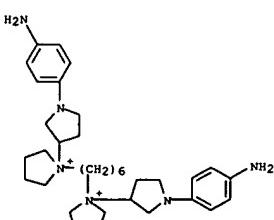
RN 667915-11-9 CAPLUS
 CN 1H-Imidazolium, 1,1'-(1,3-propanediyl)bis[3-(1-(4-aminophenyl)-3-pyrrolidinyl)-, dichloride (9CI) (CA INDEX NAME)

●2 Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 667915-25-5 CAPLUS
 CN 1,3'-Bipyrrrolidinium, 1,1'-(1,6-hexanediylyl)bis(1'-(4-aminophenyl)-, dichloride (9CI) (CA INDEX NAME)



PAGE 1-A

●2 Cl⁻

REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

ACCESSION NUMBER: 2004:17396 CAPLUS

DOCUMENT NUMBER: 140:81854

TITLE: Hair dyeing compositions containing pyrrolidinyl-p-phenylenediamine derivatives
 INVENTOR(S): Sabelle, Stephane; Ramos, Laure; Leduc, Madeleine
 PATENT ASSIGNEE(S): L'Oréal, Fr.
 SOURCE: Eur. Pat. Appl., 21 pp.
 CODEN: EPXXDW

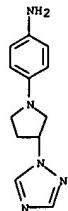
DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

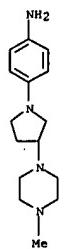
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1378230	A1	20040107	EP 2003-291616	20030701
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2841780	A1	20040109	FR 2002-8514	20020705
JP 2004035559	B1	20040910		
JP 2004040205	A2	20040205	JP 2003-271500	20030707
US 2004077852	A1	20040422	US 2003-612986	20030707
			FR 2002-8514	20020705
PRIORITY APPLN. INFO.:				
		US 2002-408900P		P 20020909

OTHER SOURCE(S): MARPAT 140:81854

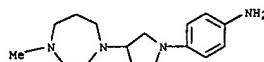
AB Pyrrolidinyl-p-phenylenediamine derivs. are useful for the dyeing of human hair fibers. Thus, 4-(3-imidazol-1-ylpyrrolidin-1-yl)phenylamine-HCl was prepared by the mesylation of N-(4-nitrophenyl)-3-hydroxypyrrrolidine in THF in the presence of Et3N followed by the reaction of the product with imidazole and hydrogenation. A formulation contained the above compound 0.001, 2-(2,4-diaminophenoxyethanol)-2HCl 0.001, a support formulation and water qs to 100 g.
 IT 640725-42-4 640725-44-6 640725-45-7
 640725-52-2 640725-53-7 640725-54-8
 640725-55-0 640725-56-0 640725-59-3
 640725-60-6
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. containing pyrrolidinylphenylenediamine derivs.)
 RN 640725-42-4 CAPLUS
 CN Benzenamine, 4-[3-(1H-1,2,4-triazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)



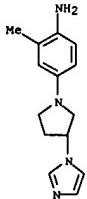
RN 640725-44-6 CAPLUS
 CN Benzenamine, 4-[3-(4-methyl-1-piperazinyl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)



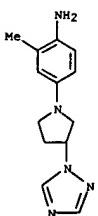
RN 640725-45-7 CAPLUS
 CN Benzenamine, 4-[3-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)



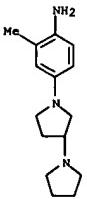
RN 640725-52-6 CAPLUS
 CN Benzenamine, 4-[3-(1H-imidazol-1-yl)-1-pyrrolidinyl]-2-methyl- (9CI) (CA INDEX NAME)



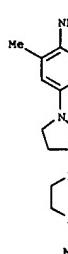
RN 640725-53-7 CAPLUS
 CN Benzenamine, 2-methyl-4-[3-(1H-1,2,4-triazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)



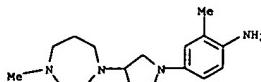
RN 640725-54-8 CAPLUS
 CN Benzenamine, 4-[1,3'-bipyrrolidin]-1'-yl-2-methyl- (9CI) (CA INDEX NAME)



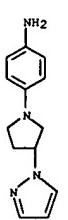
RN 640725-55-9 CAPLUS



RN 640725-56-0 CAPLUS
 CN Benzenamine, 4-[3-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-1-pyrrolidinyl]-2-methyl- (9CI) (CA INDEX NAME)

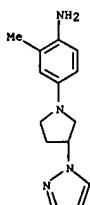


RN 640725-59-3 CAPLUS
 CN Benzenamine, 4-[3-(1H-pyrazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)

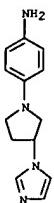


RN 640725-60-6 CAPLUS

L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 CN Benzenamine, 2-methyl-4-(3-(1H-pyrazol-1-yl)-1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

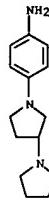


IT 640725-40-2P 640725-43-5P 640725-65-1P
 640725-66-2P
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (hair dyeing compns. containing pyrrolidinylphenylenediamine derivs.)
 RN 640725-40-2 CAPLUS
 CN Benzenamine, 4-[3-(1H-imidazol-1-yl)-1-pyrrolidinyl]- (9CI) (CA INDEX NAME)

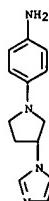


RN 640725-43-5 CAPLUS
 CN Benzenamine, 4-[1,3'-bipyrrolidin]-1'-yl- (9CI) (CA INDEX NAME)

L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



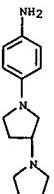
RN 640725-65-1 CAPLUS
 CN Benzenamine, 4-[3-(1H-imidazol-1-yl)-1-pyrrolidinyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 640725-66-2 CAPLUS
 CN Benzenamine, 4-[1,3'-bipyrrolidin]-1'-yl-, monohydrochloride (9CI) (CA INDEX NAME)

L21 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



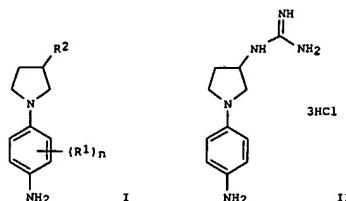
● HCl

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2003:771366 CAPLUS
 DOCUMENT NUMBER: 139:27681
 TITLE: Preparation of aminophenylpyrrolidines as dyes for keratinic fibers
 INVENTOR(S): Seville, Stephane; Ramos, Laure; Leduc, Madeleine; Philippe, Michel
 PATENT ASSIGNEE(S): L'Oréal, Fr
 SOURCE: Eur. Pat. Appl., 4 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: French
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

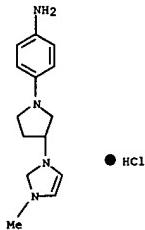
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1346695	A1	20031001	EP 2003-290597	20030311
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
FR 2837821	A1	20031003	FR 2002-3847	20020327
FR 2837821	B1	20050211		
JP 2003286256	A2	20031010	JP 2003-89390	20030327
US 2003229949	A1	20031218	US 2003-397245	20030327
US 2004194227	A9	20041007		
US 6946005	B2	20050920		
PRIORITY APPLN. INFO.:			FR 2002-3847	A 20020327
			US 2002-387499P	P 20020611

OTHER SOURCE(S) : MARPAT 139:276814
 GI



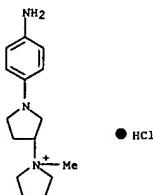
AB Aminophenylpyrrolidines I [R1 = halogen, (un)substituted alkyl, onium; n = 0-4; R2 = quaternary ammonium] were prepared for use as hair dyes. Thus, 4-FC6H4NO2 was treated with 3-acetylaminopyrrolidine, followed by deacetylation, conversion to quanidine, and reduction to give the dye II, which gave blue-violet shades in alkaline medium.
 IT 607355-86-9P 607354-93-0P 607354-98-3P
 607355-02-2P 607355-05-5P 607355-09-9P

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 607355-12-4P 607355-16-8P 607355-18-0P
 607355-19-1P 607355-20-4P 607355-21-5P
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (prepn. of aminophenylpyrrolidines as dyes for keratinic fibers)
 RN 607354-86-9 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)



● Cl⁻

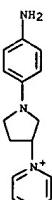
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607354-93-8 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)



● Cl⁻

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 607355-05-5 CAPLUS
 CN Pyridinium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-, acetate (9CI) (CA INDEX NAME)
 CM 1
 CRN 607355-04-4
 CMF C15 H18 N3



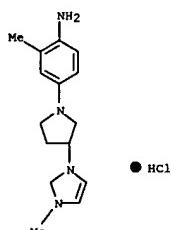
CM 2

CRN 71-50-1
 CMF C2 H3 O2



RN 607355-09-9 CAPLUS
 CN 4-Aza-1-azoniabicyclo[2.2.2]octane,
 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-,
 methanesulfonate, monohydrochloride (9CI) (CA INDEX NAME)
 CM 1
 CRN 607355-08-8
 CMF C16 H25 N4

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 RN 607354-98-3 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride, monohydrochloride (9CI) (CA INDEX NAME)

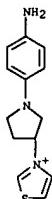


● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-02-2 CAPLUS
 CN Thiazolium, 3-[1-(4-aminophenyl)-3-pyrrolidinyl]-, acetate (9CI) (CA INDEX NAME)

CM 1

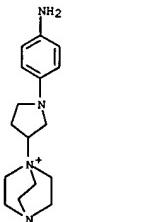
CRN 607355-01-1
 CMF C13 H16 N3 S



CM 2

CRN 71-50-1
 CMF C2 H3 O2

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

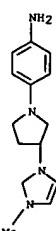


CM 2

CRN 16053-58-0
 CMF C H3 O3 S

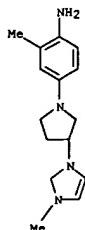


RN 607355-12-4 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



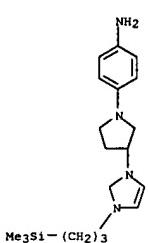
● Cl⁻

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-16-8 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-amino-3-methylphenyl)-3-pyrrolidinyl]-3-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

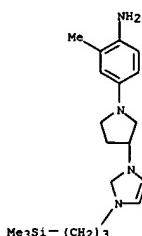
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 607355-18-0 CAPLUS
 CN 1H-Imidazolium, 1-[1-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

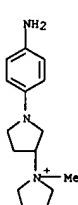
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 607355-19-1 CAPLUS
 CN 1H-Imidazolium, 1'-(4-aminophenyl)-3-pyrrolidinyl]-3-[3-(trimethylsilyl)propyl]-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

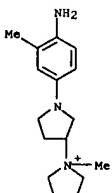
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 607355-20-4 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-aminophenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

RN 607355-21-5 CAPLUS
 CN 1,3'-Bipyrrolidinium, 1'-(4-amino-3-methylphenyl)-1-methyl-, chloride (9CI) (CA INDEX NAME)

L21 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



● Cl⁻

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN
 1997:496275 CAPLUS
 ACCESSION NUMBER: 1997:496275
 DOCUMENT NUMBER: 127:197826
 TITLE: Imido-containing polyamic acid, its manufacture, and liquid-crystal orienting agent using it for display
 INVENTOR(S): Kawamura, Shigeo; Yamamoto, Keiichi; Nishikawa, Michinori; Matsuki, Yasuo
 PATENT ASSIGNEE(S): Jpn. Synthetic Rubber Co., Ltd., Japan; JSR Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09185064	A2	19970715	JP 1995-343560	19951228
JP 3612832	B2	20050119	JP 1995-343560	19951228

PRIORITY APPLN. INFO.:

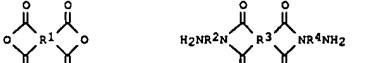
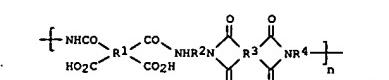
GI

AB A polyamic acid I (R₁, R₃ = tetravalent organic group; R₂, R₄ = divalent organic group) is claimed. The polyamic acid is manufactured by treating a tetracarboxylic dianhydride II and an imido-containing diamine compound III.

The orienting agent contains ± 1 polymer selected from the polyamic acid and its derivative obtained by partial imidization. Oriented films containing the agent show good adhesion with substrates, high rubbing resistance, and stable pretilt angle.

IT 194216-37-0P 194216-42-7P 194216-46-1P
 RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (liquid-crystal orienting agent using imido-containing polyamic acid for display)

RN 194216-37-0 CAPLUS
 CN Cholestan-3,6-diol, bis(4-aminobenzoate), (3 β ,5 α)-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3 α ,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione,

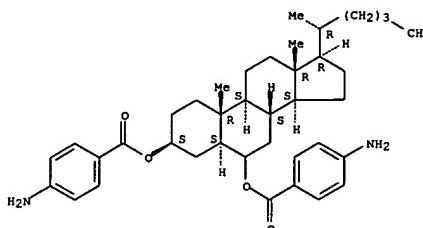


L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
 4,4'-methylenebis[benzenamine] and 3a,4,5,9b-tetrahydro-5-methyl-5-(tetrahydro-2,5-dioxo-3-furanyl)naphtho[1,2-c]furan-1,3-dione (9CI) (CA INDEX NAME)

CM 1

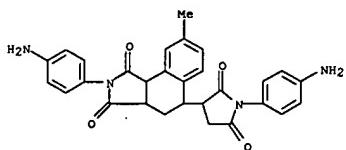
CRN 194216-36-9
 CMF C41 H58 N2 O4

Absolute stereochemistry.



CM 2

CRN 194216-35-8
 CMF C29 H26 N4 O4



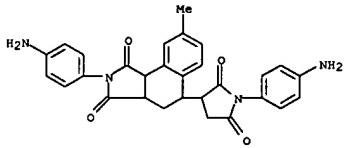
CM 3

CRN 67879-21-4
 CMF C17 H14 O6

L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

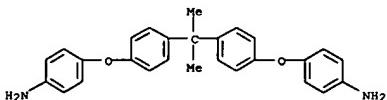
CM 2

CRN 194216-35-8
 CMF C29 H26 N4 O4



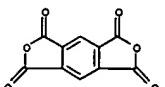
CM 3

CRN 13080-86-9
 CMF C27 H26 N2 O2



CM 4

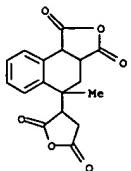
CRN 89-32-7
 CMF C10 H2 O6



RN 194216-46-1 CAPLUS
 CN Cholestan-3,6-diol, bis(4-aminobenzoate), (3 β ,5 α)-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione, 4,4'-methylenebis[benzenamine] and tetrahydro-3a,6a-dimethylcyclobuta[1,2-c:3,4-c']difuranetrone (9CI) (CA INDEX NAME)

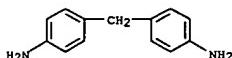
CM 1

L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



CM 4

CRN 101-77-9
 CMF C13 H14 N2



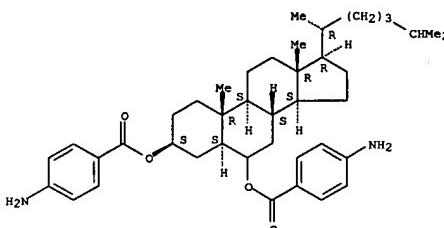
RN

194216-42-7 CAPLUS
 CN Cholestan-3,6-diol, bis(4-aminobenzoate), (3 β ,5 α)-, polymer with 2-(4-aminophenyl)-5-[1-(4-aminophenyl)-2,5-dioxo-3-pyrrolidinyl]-3a,4,5,9b-tetrahydro-8-methyl-1H-benz[e]isoindole-1,3(2H)-dione, 1H,3H-benzo[1,2-c:4,5-c']difuran-1,3,5,7-tetron and 4,4'-(1-methylethylidene)bis(4,1-phenyleneoxy)bis[benzenamine] (9CI) (CA INDEX NAME)

CM 1

CRN 194216-36-9
 CMF C41 H58 N2 O4

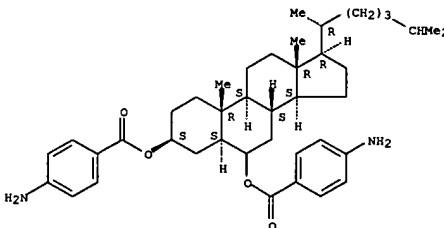
Absolute stereochemistry.



L21 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

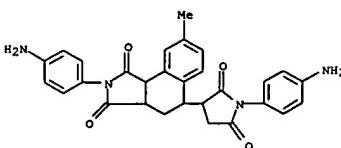
CRN 194216-36-9
 CMF C41 H58 N2 O4

Absolute stereochemistry.



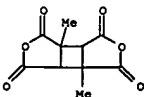
CM 2

CRN 194216-35-8
 CMF C29 H26 N4 O4

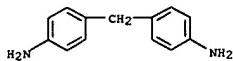


CM 3

CRN 13780-87-2
 CMF C10 H8 O6



CRN 101-77-9
CMF C13 H14 N2



IT 194216-35-8P
RL: PNU (Preparation, unclassified); PREP (Preparation)
(liquid-crystal orienting agent using imido-containing polyamic acid
for display)
RN 194216-35-8 CAPLUS
CN 1H-Benz[e]isoindole-1,3(2H)-dione,
2-(4-aminophenyl)-5-(1-(4-aminophenyl)-
2,5-dioxo-3-pyrrolidinyl)-3a,4,5,9b-tetrahydro-8-methyl- (9CI) (CA INDEX
NAME)

